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WINTER 1982-83

INTERNATIONAL EDITION

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WINTER 1982-83

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This report highlights the outlook for the international economy through 1983.

Subsequent issues of the ECONOMIC REPORT will discuss the following topics:

Long-Term U.S. Outlook, Spring-Summer 1983
California Outlook and U.S. Economic Update, Fall 1983.

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SUMMARY

For a second consecutive year, economic developments in the United States have had a major impact on the entire world. Thus, once again a forecast of the U.S. economy leads off our outlook for the world economy in 1983. We have added a new article on commodity prices, expanded the section on developing-world finance and included intermediate-term outlooks for the 1982-86 period. Only the centrally-planned economies generally remain uncovered.

Domestically, the United States slogged through the recession that began in July 1981, putting GNP in real terms at the same level as in 1979. Inflation rates fell sharply in 1982, while unemployment surpassed 10 percent, the highest since 1940. The 1983 outlook is for the economy to begin a recovery that gains strength as the year progresses without igniting anew inflationary pressures. Although unemployment rates should start to decline, they will remain painfully high in 1983.

The U.S. dollar, which appreciated 18.2 percent on an average, trade-weighted basis in 1981, continued to strengthen by 13 percent in 1982. During the third quarter of 1982, it was bumping fifteen-year highs. The dollar's strength helped to reduce U.S. inflation, but it also adversely affected the trade deficit. In 1983, the dollar is projected to depreciate 5.7 percent.

The U.S. trade deficit increased to an estimated $35.8 billion in 1982 and was a major influence causing the current account to switch to a deficit after two years of surpluses. In 1983, both the trade and current accounts are expected to post record deficits — $48.5 billion and $19.2 billion, respectively. Furthermore, if the dollar does not depreciate as forecast, the trade deficit could be in the $60 to $70 billion range, which would lead to a $30 to $40 billion current-account deficit.

The high levels of both nominal and real interest rates which lasted through the first half of 1982 allowed policy makers in most countries little choice but to keep monetary conditions tight. High real interest rates were a brake on domestic growth rates as few countries felt the freedom to lower rates. The continuing recession in the United States gained bearish strength as it spread to other industrialized economies, in turn gathering up the developing world via diminishing trade and high interest rates. Thus, the world at large breathed a sigh of relief when short-term rates began to fall in July, which turned into a persistent trend for the remainder of 1982.

The industrialized countries in 1983 are generally looking forward to improved prospects. The forecast calls for real growth for the group to expand instead of contract, the collective inflation rate to fall and the current-account deficit to increase. Annual unemployment rates, however, will offer little comfort since they are expected to remain high or increase.

Due to the worldwide recession, commodity prices dropped at double-digit rates in 1982, for the second consecutive year. Lower commodity prices contributed to the fight against inflation, but they also led to a deterioration of many developing economies that are commodity exporters. During 1983, commodity prices are expected to begin to recover as the industrialized economies lead the world out of recession. Oil prices declined about 3 percent in 1982, and supply and demand conditions promise continued weakness in 1983.

Reflecting the recession, world trade actually declined by 6 percent in 1982. The volume of world trade fell 1.2 percent, while prices declined nearly 5 percent. In 1983, trade volume should grow 3 to 4 percent, reflecting the projected recovery. An 8 percent rise in prices implies that the value of trade will increase nearly 12 percent in 1983, instead of falling as it has for the past two years.

The developing economies in 1982 confronted differing prospects. Of the non-oil exporters, the newly-industrialized countries (NICs) and potential NICs faired best, being least affected by declining oil and commodity prices. These countries should also do best in 1983 with a gradual recovery taking hold. And while the major oil-exporting developing economies will not see a complete reversal of their fortunes, a basis will be laid for a more promising future.

Faced with declining export receipts, the developing world had growing difficulty servicing its existing external debt in 1982. As lenders became increasingly concerned, simple "roll-overs" of existing debt became problematical at times. Since commodity markets are unlikely to recover strongly in 1983, another challenging year confronts the developing world. As long as governments and multilateral institutions provide assistance and commercial banks do not retrench too strongly, these countries will survive 1983, if economic policies are instituted to narrow current-account deficits so that borrowing requirements do not surpass available resources. It will be a year of heroic efforts for many. ■

OUTLOOK FOR THE U.S. ECONOMY, THE DOLLAR AND THE CURRENT ACCOUNT

After contracting 1.6 percent in 1982, GNP in price-adjusted terms was at the same level in 1982 as it was in 1979. Due to the anti-inflationary monetary policy pursued and the recession, inflation rates fell sharply in 1982. Unfortunately, the unemployment rate rose above 10 percent during the year. In 1983, real economic growth is forecast to be a positive 2.6 percent, but the expansion will not stop further declines in the inflation rate. Unemployment will start to decrease but will remain at very high percentages.

In 1982, the dollar increased in value at double-digit rates for the second consecutive year; but it is expected to depreciate in 1983. The current account is expected to post a small deficit in 1982 and it is forecast to increase to about $19 billion in 1983.

Monetary policy played a major role in economic developments in 1982, as is likely in 1983. We now turn to a discussion of U.S. monetary policy.

MONETARY POLICY

Developments in 1982

A fundamental factor troubling financial markets in 1982 was the size of current and prospective Treasury budget deficits. Fears that huge and growing deficits would ultimately force the Federal Reserve into a more inflationary policy kept markets in the doldrums much of the year. Despite significant strides in slicing government spending and enhancing revenues, market participants realized that much remained to be done.

Another troubling aspect of 1982 financial markets was the illiquid state of businesses. A sharp deterioration of business profits was a reality. Furthermore, hostile long-term markets in 1982's first half delayed the traditional pattern of restructuring from short-term to longer-term debt — thus generating concerns about the "crowding out" of private credit demands once the economy turned around. Finally, markets became jittery beginning in the summer months due to fears of major international financial problems.

Since the Federal Reserve changed its operating procedures in October 1979, there has been little question about its resolve to slow inflation. It is true that the monetary authorities allowed the money supply to grow faster than their announced targets in 1979 and 1980, but they hit their M-1 target in 1981 and tried hard to hit it during the first half of 1982. (M-1 is composed of currency, demand deposits, all other checkable deposits and travellers' checks.) The 1982 growth-range target for M-1 was 2.5 to 5.5 percent, measured on an average, fourth-quarter to fourth-quarter basis.

In virtually the entire first half of 1982, money-supply growth was above the Federal Reserve's target. Only in the last weeks of June did the combined effects of a weak economy and prolonged, restrained monetary policy finally bring M-1 growth within its target range and allow the Federal Reserve to begin providing more reserves to the banking system and to start lowering the discount rate. Growth of M-1 during the third quarter left that monetary aggregate slightly above the upper bound of the growth-range target by the end of September.

In October 1982, however, it became clear that M-1 would be further bloated by some $31 billion of maturing All Savers' Certificates. Furthermore, if the authorities had decided to try to hit the M-1 target, interest rates would have necessarily risen much higher — removing any hope of an economic turnaround. Thus, in early October the Federal Reserve made it clear to market participants that it would temporarily pay much less attention to M-1 and more attention to broader money aggregates and the economy. Though the Federal Reserve's change of emphasis was a welcome

relief to the markets, fears arose that it represented a cave-in on controlling inflation. In order to soothe those fears to some degree and to try to ensure a moderate recovery, monetary authorities led the way to lower rates in small, measured doses rather than pulling the discount rate down quickly.

Outlook for Monetary Policy and Interest Rates in 1983

By mid-1983, if not before, it appears likely that the Federal Reserve will return its primary focus to M-1 from the broader monetary aggregates. One reason for expecting such a result is that such a focus should not be as constraining in 1983 as it has been in 1982. First, the fourth-quarter M-1 bulge sets a high base from which 1983 growth targets will be set. Second, the new money market fund instrument available at financial institutions should pull some funds from NOW accounts and demand deposits (that is, M-1) into the broader aggregates in early 1983. Finally, given our forecast that nominal GNP will rise by less than 10 percent between the fourth quarters of 1982 and 1983, the implied velocity growth is only approximately 4.5 percent. While such growth is higher than the trend rate, it is easily within historical experience — especially for the first year of economic recovery when income velocity accelerates.

The implications for interest rates of a weak but substained recovery coupled with relative ease in the Federal Reserve's ability to hit its 2.5 to 5.5 percent target range seem clear. Interest rates will move lower in 1983. Other key reasons for this expectation are that real interest rates were at record levels for the postwar period in much of 1982 and inflation is expected to stabilize in the 5 to 6 percent range next year. In this type of an environment, it seems natural that real interest rates, as well as nominal rates, will ratchet downward as the differential between nominal rates and the level of inflation narrows.

THE ECONOMY

Although 1982 began with a large drop in real output, the U.S. economy expanded weakly during the remainder of the year. The growth trend since the second quarter was so weak, however, and sectoral declines were so widespread, that virtually no one would be willing to declare a recovery (as of November 1982). Initially confined to the credit-sensitive sectors of the economy, the recession that began in July 1981, became widespread by the middle of 1982. Then sectors of the economy that had previously been considered nearly immune to the effects of recession, such as petroleum and retail trade and services, began to succumb to the weak product demand that had earlier been limited primarily to credit-sensitive sectors such as construction and durable goods manufacturing.

FORECAST HIGHLIGHTS
(Billions of Dollars)

	1981A	1982E	1983F
Nominal GNP	2,937.7	3,069.5	3,327.1
% Change	11.6	4.5	8.4
Real GNP (1972 $)	1,502.6	1,478.7	1,517.5
% Change	1.9	−1.6	2.6
GNP Deflator (1972 = 100)	195.5	207.6	219.2
% Change	9.4	6.2	5.6

A = Actual E = Estimate F = Forecast

Now that interest rates have declined substantially from recent high levels, it is the credit-sensitive industries that are expected to lead the recovery. The housing industry already appears to have revived somewhat during the fourth quarter of 1982, and the domestic automobile industry is probably not far behind. Additional stimulus to the 1983 economy will be provided by federal government purchases of defense goods and services, which are expected to increase more than 6.3 percent over the 1982 level. Inventory building should also become a positive force in early 1983, although a conservative relationship between inventories and sales is likely to prevail, limiting inventory growth to an historically modest amount.

Business capital spending should continue to decline through most of 1983, since the decline in interest rates will probably not be sufficient to overcome the negative effects of high excess capacity, poor cash flow, and weak product demand until late in the year. In the case of nonresidential structures, no recovery appears likely before 1984. This weakness in capital spending, more than any other factor, will prevent the 1983 recovery from being very robust. Also contributing to moderation in this recovery will be the weakness of the nation's principal trading partners which will result in very little growth in net exports.

The expected stimulus from the housing and defense sectors should be joined by rising consumer spending for durable goods in early 1983. Although major domestic automobile manufacturers offered below-market financing during the fourth quarter of 1982, in an effort to stimulate sales, most of that effort was aimed at the excess inventory of 1982 models on dealers' lots. The real recovery in auto sales, for 1983 model cars sold at full price and financed at market rates, is not likely to come until consumer loan rates fall further, probably in the early part of 1983.

We currently estimate that total unit sales of autos will average only 8.7 million units during 1983, or about the same as in 1981. That volume would provide a fairly large percentage gain over 1982's depressed sales, but would nevertheless be very weak in historical terms. Real consumer spending for nondurable goods and services should increase at about a 2 percent average rate in 1983, with late-year gains coming close to a 3 percent annual rate.

The weakest sector of the 1983 economy will undoubtedly be business fixed investment. The producers' durable equipment category, already weak from years of very adverse financial conditions, declining profits, and weak sales, is now suffering from disinflation pressures that have depressed the rate of product price increase below that of input cost increase in many industries. These pressures have been felt most acutely, perhaps, in the domestic oil drilling business, which is now reducing its capital stock after years of rapid growth. The durable equipment market will probably not see any net growth before the second half of 1983. Investment in nonresidential structures, which continued to grow slightly in the first half of 1982, turned down sharply in the second half, and is not expected to have a positive trend again until the end of 1983 at the earliest.

Although commercial building is expected to remain weak, it now appears that the housing market is coming back more strongly than had recently been expected. Total residential housing starts could reach a level of 1.5 million as soon as late 1983 if the improving trend in financing for both builders and borrowers persists a while longer. It appears that mortgage rates could reach an average of 13 percent fixed conventional loans at some point in 1983, and adjustable rates could fall somewhat lower. Those rates, along with a general improvement in the economic outlook, would probably be low enough to begin to liquefy some of the considerable pent-up demand for housing that is now estimated to exist.

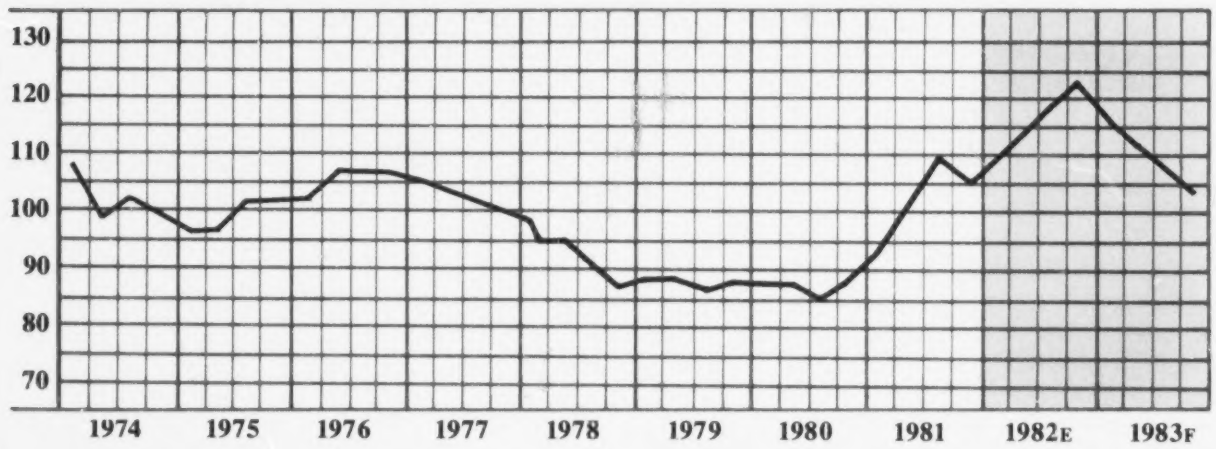
Another sharp slowdown in consumer price inflation appears to have occurred in the final months of 1982. The CPI should have increased less than 2 percent in the fourth quarter, down from the energy-related "surge" of 7.6 percent in the third quarter. Much of the current weakness of consumer prices may be traced to the decline in interest rates and other financing costs and to

U.S. ECONOMIC OUTLOOK
Selected Economic Indicators

				Annual Growth Rates		
	1981A	1982E	1983F	1980-81	1981-82	1982-83
Housing Starts (millions)	1.10	1.05	1.38	-14.4	-4.8	31.3
Automobile Sales (millions)	8.6	7.7	8.7	-5.2	-10.5	13.0
Unemployment Rate (percent)	7.6	9.6	9.8	—	—	—
Industrial Production (1967 = 100)	150.9	139.2	144.7	2.6	-7.8	4.0
Personal Income ($ billions)	2,415.8	2,575.0	2,785.2	11.8	6.6	8.2
Disposable Personal Income ($ billions)	2,029.1	2,177.0	2,364.8	11.2	7.3	8.6
Corporate Profits After Taxes ($ billions)	150.9	122.0	147.3	-4.4	-19.1	20.8
Consumer Price Index (1967 = 100)	272.4	289.0	302.8	10.4	6.1	4.8
Producer Price Index (1967 = 100)	269.8	280.4	292.2	9.2	3.9	4.2

A = Actual E = Estimate F = Forecast

TRADE-WEIGHTED QUARTERLY AVERAGE EXCHANGE RATE FOR U.S. DOLLAR



Index: March 1973 = 100

E = Estimate F = Forecast

the "overcounting" of those components in the present index. Effective in January 1983, the cost of homeownership in the CPI will be measured primarily by a "rental-equivalence" concept that should reduce the bias of the current index, which overstates the effect of rapid changes in interest rates. Even without the effect of further interest-rate-related declines in the revised index, it appears improbable that the inflation rate will exceed the range of 5 to 6 percent for most of 1983.

Slack industrial capacity and continued high unemployment, expected to average close to 10 percent in 1983, should continue to be stabilizing influences on inflation. Manufacturing capacity utilization, which has recently been averaging less than 70 percent, is expected to rise to only 75 percent in 1983. This continued excess capacity indicates that industrial output can expand substantially without encountering any significant cost pressures.

OUTLOOK FOR U.S. DOLLAR

The 1982 Performance

The average trade-weighted value of the U.S. dollar jumped about 13 percent in 1982, which was surprising in light of its large 18.2 percent appreciation in 1981; between the fourth quarters of 1981 and 1982, it rose approximately 16.7 percent. Consequently, the dollar reached levels in the third quarter unseen since the first half of 1971. (In October, the dollar attained a monthly value unmatched since September 1969.)

Initially in 1982, high real U.S. interest rates and interest-rate differentials played a significant role in the appreciation of the dollar. Later in the year, other economic and political developments came to have a relatively greater impact. Hence, the subsequent decline in U.S. interest rates did not stop the dollar from strengthening further. Among the factors tending to sustain the dollar was the movement of capital out of Japan and elsewhere into the United States. Moreover, 1982's U.S. trade and inflation performances were improvements over forecasts made in 1981, even though the trade position began to deteriorate sharply in the third quarter. For the first half of the year, the eroding competitiveness of U.S. exports was more than offset by import sluggishness due to the recession and by more efficient energy use.

The 1983 Outlook

As we enter 1983, our forecast calls for a substantial weakening of the dollar over the course of the year. We see the dollar depreciating by about 5.7 percent on an average, year-over-year basis, and falling by a greater 15.4 percent between the fourth quarters of 1982 and 1983.

The effect of slow export growth, because of our trading partners' minimal economic growth, will be only partially offset by slow import growth due to the weak recovery of the U.S. economy. Hence, the merchandise-trade deficit will not improve much from 1982's second-half results.

The current outlook is for U.S. interest rates to fall through most of 1983. Therefore, interest-rate differentials are unlikely to offer additional strength to the dollar, even though declines in some countries may exceed U.S. cuts. Additional reductions in the domestic inflation rate, however, will tend to keep the dollar from weakening more sharply.

Another significant factor, which will affect the performance of the dollar in 1983, will be the progress of the Reagan economic program. Some indications, such as huge fiscal deficits, high unemployment and a shift toward revenue enhancement, suggest that the program has problems. Nevertheless, the Reagan program remains a pro-dollar phenomenon. Indeed, any erosion of the President's political base may be perceived as anti-dollar. Major questions, however, about the implications of the budget deficit for inflation and interest rates remain unanswered. If higher interest rates were to ensue from fiscal "crowding-out," a stronger dollar could result. It is not clear that such a development would necessarily occur in the present environment, given the current levels of concern about the economy's ability to recover.

The events which could alter our forecast of declining dollar strength in 1983 are closely, but inversely, tied to the U.S. recovery. For example, an aborted U.S. recovery could easily have pro-dollar implications because of its trade impact and because of its disastrous implications for the rest of the world.

U.S. MERCHANDISE-TRADE AND CURRENT-ACCOUNT DATA
(Billions of U.S. Dollars)

	1981	1982E	1983F
Merchandise Trade			
Exports	236.25	216.25	235.50
Imports	264.14	252.00	284.00
Balance	-27.89	-35.75	-48.50
Services			
Exports	136.64	138.65	140.00
Imports	-97.67	-100.00	-101.00
Balance	38.97	38.65	38.00
Transfers, net			
Official	-4.50	-4.95	-5.60
Other	-2.10	-2.75	-3.10
Balance	-6.61	-7.70	-8.70
Current-Account Balance	4.47	-4.80	-19.20

E = Estimate F = Forecast

Finally, our forecast assumes that political strains in Eastern Europe and the Middle East will continue but generally diminish. An all-out confrontation in either region would be viewed as very pro-dollar in foreign exchange markets.

In summary, this outlook for a dollar declining in value is based on expectations for a reasonably favorable performance of the U.S. economy, except for the growing current-account deficit, and a world with continuing, but not explosive, political problems. Given that forecasters consistently underestimated the strength of the dollar in 1982, due to the impact of political and economic uncertainties, the risk of this forecast would appear to be for a stronger rather than a weaker dollar.

THE CURRENT ACCOUNT

The 1982 Results

After posting surpluses in 1980 and 1981, the current account slid into a deficit of approximately $4.8 billion in 1982. The deterioration resulted from larger merchandise-trade and net-transfers deficits and a fairly constant surplus on the services account.

The merchandise-trade deficit increased from $27.89 billion in 1981 to an estimated $35.75 billion in 1982. The major causes were the increased international value of the dollar and the differential between U.S. and foreign economic growth rates. The 13 percent rise in the average, trade-weighted value of the dollar in 1982, following an even larger increase in 1981, discouraged merchandise exports and encouraged imports, notwithstanding the U.S. recession, which tended to dampen the demand for imports. The U.S. economy preceded most of our trading-partners' economies into recession; hence, export demand remained remarkably strong through the first half of 1982. When the effects of the dollar's strength combined with those of the differential rates of growth, the volume of exports fell an estimated 10.2 percent while that of imports declined 2.5 percent.

The services-account surplus for 1982 is projected to amount to $38.65 billion. The lack of growth in the surplus was influenced by declines in interest rates and the worsening recession overseas. Lower interest rates decreased earnings on U.S. lending abroad while the recession hurt the profit situation overseas. In general, these factors were more adverse for the export of invisibles than for imports.

The 1983 Outlook

For 1983, the trade deficit is expected to deteriorate sharply, to about $48.5 billion. Even though the dollar is forecast to depreciate 5.7 percent in 1983, on average, the decline will not be sufficient to influence exports and imports to prevent a distinct increase in the deficit. Simultaneously, the forecast for 1983 calls for the U.S. economy to recover sooner than other economies, in general; as a result, import growth is expected to increase more rapidly than export growth.

The services-account surplus will continue to erode slightly in 1983. The faster U.S. economic recovery implies that profits will be better in the United States than elsewhere, and lower interest rates should act as a further damper on foreign earnings. The declining dollar should help tourism earnings, but the earlier recovery of the U.S. economy should encourage the U.S. tourist to go abroad.

A $19.2 billion deficit on the current account would be a record for the United States. In both 1977 and 1978, the current-account deficits slightly exceeded $14 billion. The current-account deficit can be put on a more realistic basis for comparison by stating it as a percentage of nominal GNP. The 1977 current-account deficit of $14.11 billion, which was the previous record, equaled 0.7 percent of GNP, while the $19.2 billion deficit forecast for 1983 would amount to a smaller 0.6 percent.

The major risk to the 1983 current-account forecast is that the deficit will be considerably larger than $19 billion. If the value of the dollar does not decline fairly steadily and by significant amounts in the first half of the year, then the trade deficit could easily increase to $60 to $70 billion. Thus, a current-account deficit of $30 to $40 billion would result. A current-account deficit in this range would equal 0.9 to 1.2 percent of GNP, which is not very large in comparison to rules-of-thumb used to judge such deficits. Finally, if the value of the dollar does not fall as predicted, it will impede improvement in 1984's trade deficit.

The recovery of the U.S. economy in 1983, the decline in the value of the dollar and the large increase in the current-account deficit promise an improved growth environment for the industrialized economies in 1983. The outlook for the industrialized economies is found in the next article. ■

OUTLOOK FOR THE INDUSTRIAL COUNTRIES

Any recovery of the world economy awaits a recovery of the industrialized nations as a group. In 1982, this group, which accounts for approximately three fourths of the non-communist world's output, was in recession. In 1983, however, a recovery led by the United States is forecast.

UNEXPECTED WEAKNESS IN 1982

The industrial countries have yet to experience a sustained recovery after the second oil shock of 1979-80. Output in the first half of 1982 was slightly below the average level for 1981 and only barely above the level prevailing two years earlier. Excess capacity in the major industrial countries has steadily increased and unemployment rates are currently at post-war peaks everywhere except in Japan.

The unexpected weakness of demand in the industrial countries in 1982 can be traced in part to the United States, which alone accounts for 38 percent of GNP in the OECD area. The U.S. recession that began in July 1981 has been considerably deeper than foreseen. Instead of posting a small year-over-year increase, as expected a year ago, the sharp downturn in the economy in late 1981 and early 1982 helped to produce a drop of 1.6 percent in U.S. real GNP for 1982.

In most other industrial countries, demand has also been disappointingly weak. The Common Market countries (EEC) as a group managed to achieve a small increase in real growth in 1982 (the only group of countries shown in the "Key Indicators" table for the industrialized economies that did so), but their weighted-average growth rate of 0.4 percent fell far short of the 1.5 to 2 percent advance expected a year ago. Despite encouraging signs of a revival of consumer demand in the third quarter, output in the United Kingdom continued to stagnate while in France, Italy and most of the smaller Common Market and other European countries, industrial production is still flat or declining. Expectations of consumers and producers in France were dimmed by the shift to more restrictive economic policies forced on the government by the weakness of the franc.

The change in economic conditions and expectations has been most marked in Germany, however, where the new government now expects a decline in real GNP in the second half of 1982 and zero growth in 1983. Among the major countries, Japan has been the exception in that growth has continued in 1982, supported by domestic demand. Nevertheless, even there the pace of expansion has been sufficiently weak that the economy is in recession by the Japanese definition and has been insufficient to avert a rise in the nation's unemployment rate.

The weakness of demand in the industrial countries in 1982 was aggravated by a slump in export demand and a further decline in fixed investment. Still expanding quite strongly in the second half of 1981, world demand for the exports of industrial countries, particularly the European economies and Japan, leveled off and then declined in the first half of 1982. The U.S. recession accounted for part of the downswing, but the latter was clearly intensified by the deteriorating financial and economic position of the developing countries and the nations of eastern Europe.

Western developing countries (including oil exporters) and the socialist countries combined presently account for 30 percent of the merchandise exports of the industrial countries as a group, and for roughly 40 percent and 48 percent of the exports of the United States and Japan, respectively. In 1982, the major oil-exporting countries cut import growth somewhat, in response to declining oil revenues, as did the non-oil-exporting developing countries, which were faced with falling commodity prices, increased debt-service burdens, and diminishing access to new banking credit. The eastern European nations, confronted simultaneously by a virtual embargo on western credit and a sharp deterioration in terms-of-trade with the Soviet Union, were similarly forced to pare imports from the western industrial countries to the maximum extent possible.

KEY INDICATORS FOR INDUSTRIAL COUNTRIES

	Real Growth (Percent)[1]			Consumer Prices (Percentage Change)[1]			Current-Account Balance (Billions of U.S. Dollars)		
	1981	1982E	1983F	1981	1982E	1983F	1981	1982E	1983F
Major Industrial Countries	**1.3**	**−0.3**	**2.3**	**9.9**	**7.0**	**6.0**	**−5.6**	**−7.2**	**−20.0**
United States	2.0	−1.6	2.6	10.4	6.1	4.8	+4.5	−4.8	−19.2
Japan	2.9	2.4	3.5	4.9	3.0	3.5	+4.7	+ 7.5	+9.5
Germany	−0.3	−1.0	0.5	5.9	5.1	4.0	−7.6	+2.0	+3.5
France	0.3	1.3	1.5	13.4	13.0	12.5	−7.3	−12.0	−10.0
United Kingdom	−2.7	0.7	1.7	11.9	8.6	6.5	+12.7	+5.0	+1.7
Italy	−0.2	1.0	1.6	18.7	16.4	15.0	−8.1	−4.8	−3.4
Canada	3.1	−4.0	2.0	12.4	11.0	8.5	−4.5	−0.1	−2.1
Other Industrial Countries	**0.7**	**0.4**	**1.3**	**11.1**	**10.6**	**10.6**	**−22.9**	**−20.4**	**−15.8**
Australia	4.3	0.5	1.0	9.6	11.4	11.5	−8.4	−9.2	−8.5
Austria	0.1	0.8	2.3	6.8	6.3	4.8	−1.6	−0.8	−1.3
Belgium	−0.6	0.0	1.0	7.6	9.0	10.0	−5.2	−3.8	−3.0
Denmark	−0.3	1.7	1.5	11.7	10.5	9.0	−1.9	−2.3	−2.0
Finland	1.0	0.5	2.1	12.0	9.5	10.0	−0.2	+0.2	+0.3
Greece	−0.5	1.0	1.5	24.5	25.0	26.0	−2.6	−3.3	−3.4
Iceland	1.3	−1.5	0.5	51.6	45.0	40.0	−0.1	−0.2	−0.1
Ireland	1.6	2.3	2.5	20.4	17.7	13.0	−1.9	−1.0	−1.0
Luxembourg	−2.0	0.2	2.0	8.1	9.2	9.0	—[2]	—[2]	—[2]
Netherlands	−1.3	0.0	0.5	6.7	6.2	5.0	+3.2	+5.0	+6.0
New Zealand	4.0	0.0	1.0	15.3	16.1	8.0	−1.1	−1.0	−0.9
Norway	0.8	−0.5	0.8	13.6	10.8	9.5	+2.4	−0.7	+0.5
Spain	0.3	1.0	2.0	14.6	14.5	16.0	−5.0	−3.8	−3.5
Sweden	−1.0	0.0	1.5	12.1	9.0	12.5	−3.1	−2.5	−1.9
Switzerland	1.9	−0.5	1.0	6.5	5.5	4.0	+2.6	+3.0	+3.0
Total, Industrial Countries	**1.2**	**−0.2**	**2.4**	**10.0**	**7.6**	**6.7**	**−28.5**	**−27.6**	**−35.5**
Memorandum Items:									
Total Excluding U.S.	0.8	0.7	1.9	10.2	8.9	8.3	−33.0	−22.8	−16.3
EEC Countries (10)	−0.1	0.4	1.2	11.3	10.0	8.9	−18.7	−15.2	−11.6
Other OECD Countries									
Portugal	2.0	2.0	1.8	20.0	25.0	22.0	−2.7	−2.8	−3.0
Turkey	4.0	4.5	5.0	36.6	35.0	40.0	−2.4	−1.8	−1.2
All OECD Countries	1.3	−0.2	2.2	10.3	7.8	7.0	−33.6	−32.2	−39.7

[1]Aggregate figures for country groups are weighted averages. Weights for both real growth and consumer prices are 1981 GNP/GDP at current prices and exchange rates. The Organization for Economic Co-operation and Development (OECD) uses the same method to compute weighted-average real growth rates, but substitutes private consumption for GNP/GDP in its weighted inflation rate calculations.

[2]Luxembourg's current-account balance is included in the figures for Belgium (Belgium-Luxembourg Economic Union).

E = Estimate F = Forecast

Demand for fixed investment, which weakened in 1981 and declined in many industrial countries in 1982, has been adversely affected by a number of factors: the persistence of high interest rates in both nominal and real terms; uninspiring sales prospects and dwindling business confidence; widespread declines in capacity utilization; the well-publicized failures of a number of major multinational firms; declining raw materials prices; and rapidly rising bankruptcy rates. These con-

ditions have interacted to deter all but the most essential rationalization and replacement investments. Private fixed investment spending is estimated to have declined by 5.6 percent in real terms in the United States in 1982, while in Europe the EEC Commission estimates that the total volume of public and private fixed capital formation in the Community dropped by 3 percent. In Japan, fixed investment apparently continued to expand in 1982, but at a slower pace than in 1981.

A LIMITED RECOVERY IN 1983

Despite the economic weakness exhibited by most of the OECD countries in 1982, all recent forecasts of the industrial-nation group look for at least a slight upturn in 1983. Discussed below are the factors which should produce some strengthening in demand and output in 1983, along with the conditions likely to constrain the recovery.

Favorable Inflation Prospects

The twenty-two industrial countries shown in the "Key Indicators" table in this article managed to lower their combined inflation rate from 10 percent in 1981 to an estimated 7.6 percent in 1982; i.e., by nearly one fourth. As shown in the upper half of the table, most of the improvement was registered by the seven largest industrial countries (with particularly striking gains by the United States and the United Kingdom), whose weighted-average inflation rate declined by almost three percentage points. Among the fifteen smaller and medium-sized industrial countries, the inflation performance remained roughly the same or deteriorated in six countries (Australia, Belgium, Greece, Luxembourg, New Zealand and Spain), while the rest posted improvements.

In 1983, a further gain on the inflation front of about one percentage point in the industrial-country average should be possible, with the largest economies again responsible for the improvement. For the OECD countries combined (including Portugal and Turkey, which are covered in another section of this *Report*), the forecast average rate of inflation in 1983 is 7 percent, the lowest for the area in a decade.

Continued weakness in oil and non-oil commodity prices in 1983 is one part of the explanation for further improvement in the inflation performance.[1] Given probable supply and demand conditions, crude oil prices are unlikely to rise in 1983; in fact, they could possibly decline further from 1982 levels. Likewise, the sharp drop in prices of other commodities traded internationally is unlikely to be reversed to a significant extent in 1983.

With unemployment levels high and continuing to rise, moderate wage demands should also contribute to downward pressure on prices in the industrial countries. In addition, a trend appears to be developing in Europe toward at least a temporary de-indexation of wages from prices. Steps in this direction have been taken or proposed recently in Denmark, Belgium and the Netherlands; in Italy, the main employers' federation announced last summer that they would suspend automatic payments under the country's 1975 indexing scheme from January 1983. Disinflationary alterations in wage-escalator mechanisms could also be introduced in other industrial countries as part of 1983 budget and collective bargaining packages.

Finally, Japan and many of the European countries should experience an improvement in terms-of-trade in 1983 due to some recovery in the value of their currencies *vis-a-vis* the U.S. dollar. Although neither massive nor universal downward pressure on the dollar is expected, the forecast deterioration in the U.S. merchandise-trade and current-account deficits in 1983 suggests that the dollar will give up at least part of its sharp gain over the past two years against the principal currencies. Currency appreciation, coupled with subdued rises in raw materials prices, should favorably affect import costs and, hence, domestic prices in a number of industrial countries.

Lower Interest Rates

Contrary to expectations, short-term dollar interest rates rose sharply in early 1982 and hovered in the 14-16 percent range until after mid year. With the dollar already strong on the foreign exchange markets, money market rates in most other industrial countries were forced to follow.[2] The persistence of high interest rates — made even more daunting in real terms by the general decline in inflation rates — was undoubtedly a major factor delaying the onset of recovery and aggravating the debt-servicing difficulties of companies and developing countries.

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[1]Prospects for crude oil and other commodity prices are discussed in greater detail in the following article on the outlook for commodity prices.

[2]The principal exception was the United Kingdom, where short-term rates declined fairly steadily in the first half.

Short-term dollar interest rates dropped rapidly in July and August and have generally trended downward since then. These developments allowed central banks in other major financial centers to cut money market rates more aggressively, a policy that clearly suited their domestic needs. The trend toward lower interest rates in the industrial countries (or at least the absence of sustained upward pressure on rates) is expected to continue into 1983 and could, in fact, persist for the better part of the year. One reason for this expectation is the weakness of the projected recovery. Another, and perhaps more important supporting factor is the recent trend toward intensified consultation and better coordination of monetary policies among the central banks of the leading industrial countries.

It seems reasonably clear that in the wake of Mexico's debt crisis last summer, central bankers acting through the medium of the Bank for International Settlements have determined that a premature rise in interest rates on world markets constitutes a major threat, not only to prospects for world recovery, but to the viability of the international banking system. This realization has led to a relaxation, or at least to a more liberal interpretation of the functions of monetary policy in the major industrial countries in recent months.

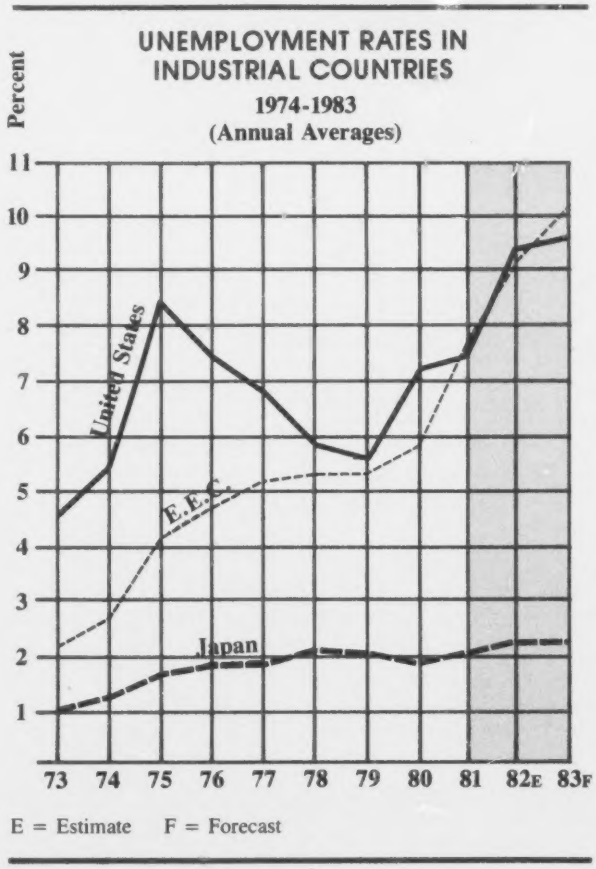
Most important among these moves was the U.S. Federal Reserve's decision in October to de-emphasize the narrow money supply (M1) as a target variable, upgrading the importance of two broader monetary aggregates which it was prepared to see expand at a faster rate over the remainder of the year. At its October meeting the Fed also established a new, lower target band for the key overnight Federal Funds rate. Between the end of June and late November, the Fed had reduced its discount rate by a total of 3 percentage points, from 12 percent to 9 percent.

In Germany, the Bundesbank lowered its discount and Lombard rates in August and October, and has provided considerable liquidity to the banking system in recent months through the offer of various low-cost facilities, open market operations and a reduction in reserve requirements. In the United Kingdom, where the trade-weighted exchange rate has for some time been the principal monetary policy variable, money supply growth has been allowed to accelerate steadily since July as the Bank of England intervened aggressively in the money markets to force interest rates down.

Consumer Is the Key to Recovery

Further reductions in inflation and a lower level of interest rates in 1983 are the catalysts necessary to spark a recovery in consumer demand, particularly among the major industrial countries. Together with scheduled or anticipated tax relief in the United States, Japan and the United Kingdom (possibly in Germany as well, depending on political pressure in the run-up to the March election) continued declines in inflation rates should strengthen the real disposable income positions of households. Lower interest rates should act simultaneously as both an inducement to borrow for large purchases and as a disincentive to save.

In the United States and Japan, the two largest industrial economies, consumer demand is expected to play the major role in boosting GNP growth in 1983. Forecasters in Canada and the United Kingdom likewise look toward a recovery in the volume of consumer spending to lead their economies out of the slump. For the ten EEC countries combined, real growth in consumer spending should be about 1 percent in 1983, up from virtually zero growth in 1982. As



E = Estimate F = Forecast

Belgium, the Netherlands, Denmark and Ireland have introduced budgetary restraints or income policy guidelines which will tend to reduce private consumption in 1983, however, the combined total of consumer spending in the other six member countries is expected to grow somewhat more rapidly than the EEC average.

Increases in inventories could also play a relatively important role in the recovery process in the United States and in a number of European countries. Lower short-term interest rates and strengthening demand at the retail level should act to stimulate inventory-building during the course of 1983.

Constraints on the Recovery

Changes in goverment spending, fixed investment and net exports are not expected to contribute significantly in 1983 to the recovery of demand and output in the industrial-country group as a whole. Fiscal policy is likely to remain oriented toward the medium-term strategy of reducing budget deficits in order to facilitate recovery in the private sector and reduce inflationary expectations. Fixed investment spending in real terms will not turn up until business confidence revives and existing margins of excess capacity are perceived to be steadily diminishing. At best, the volume of fixed investment outlays may cease declining in the industrial countries in 1983.

For the industrial countries combined, growth in the volume of imports of goods and services should roughly match that of exports; thus in net terms, the contribution of trade flows to real GNP/GDP growth will be near zero. The primary constraints on industrial-nation export growth will be the further spread of protectionism[3] and continued weak demand from outside the area — i.e., from the developing countries and the centrally-planned economies.

Among individual countries and between the two industrial country groupings, changes in real trade balances will diverge considerably from zero. Broadly, the "Other Industrial Countries" shown in the "Key Indicators" table are expected to improve their real trade balances relative to those of the major countries, particularly the United States and the United Kingdom. Due to anticipated exchange rate movements, terms-of-trade in many industrial nations should also improve, while those of the United States will deteriorate. Additionally, lower interest rates will strengthen the invisibles balances of the net debtors among the industrial countries (most of the "Other Industrial Countries" plus Canada and Italy), at the expense of the major financial-market countries.

The net result of these divergent movements and trade-offs is shown in the "Current-Account Balances" columns in the "Key Indicators" table. The current-account deficit of the United States is forecast to deteriorate sharply, while the remaining industrial countries should together post an improvement of over $6 billion in 1983. More than three fourths of the latter amount is expected to be generated by amelioration in the current-account position of the "Other Industrial Countries."

In summary, SPNB's short-term forecast calls for a modest upturn in real GNP/GDP in the industrial countries in 1983, led by consumer demand and aided in some countries by inventory and/or trade movements. Real growth of 2.4 percent will again be insufficient to prevent increases in unemployment rates in nearly all industrial countries. Excluding the United States, GNP/GDP growth is expected to average 1.9 percent, while the EEC countries should post an advance of 1.2 percent. It is worth noting that both of these figures are lower than those we forecast a year ago for these two groups in 1982. Unfortunately, the balance of risks to the forecast for 1983 again appears to be on the side of weaker demand and higher unemployment.

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[3]Protectionist actions, especially bilateral "market-sharing" arrangements and subtle forms of discrimination (e.g., technical and administrative restrictions), have proliferated in recent years. Since industrial countries trade primarily with each other, most protectionist measures are aimed at other industrial countries or country groups. Formal protests to GATT from the United States, the EEC and Japan over cars, steel, textiles, agricultural products, and stereo and video equipment have become virtually a daily occurrence.

Trade *within* the EEC is even being disrupted increasingly by infringements of Community free trade regulations. *The Economist* reported in its November 6, 1982 issue that at the beginning of 1982 the EEC Commission was taking action against member states for no less than 140 confirmed infringements.

In November 1982, GATT signatories discussed these issues in depth at their first full ministerial meeting since 1973. In the present climate of business pessimism and rising unemployment, however, the ministers' apparent support for free trade will be insufficient to stem the tide of protectionism.

MEDIUM-TERM OUTLOOK

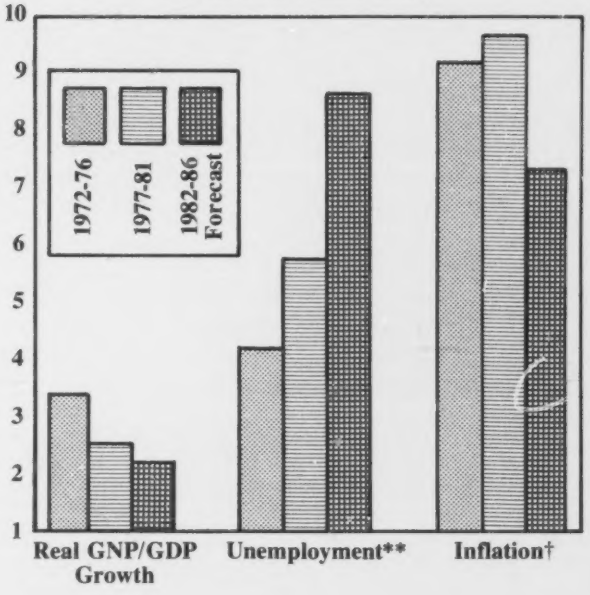
Under any realistic set of assumptions, medium-term prospects for the industrial countries as a group are not particularly promising. In the graph shown, three broad measures of economic performance over the two most recent five-year periods are compared to forecasts for the 1982-86 period. Both historical periods include an "oil shock" (1973-74 and 1979-80), and the earlier period contains a recession year (1975) in which the decline in real GNP/GDP was roughly twice as large as that experienced by the industrial countries in 1982.

The key assumptions underlying the forecasts are that control of inflation will remain the principal objective of economic policy, that monetary policy will remain "tight" in relation to the two earlier periods (even allowing for the more flexible approach to monetary policy evident since mid-1982), and that long-term real interest rates will therefore average higher in the 1982-86 period than in either of the previous periods. Fiscal policy will be characterized by a struggle to reduce budget deficit/GDP ratios and there will be no co-ordinated reflationary efforts. Finally, crude oil prices are assumed to change little in real terms over the 1982-86 period.[4]

Using these assumptions, average real GNP/GDP growth in the industrial countries will continue to slow in the 1982-86 period, to 2.2 percent, from 2.6 percent in the most recent half decade and 3.4 percent in the 1972-76 period. Following the forecast recovery in 1983, real growth is expected to strengthen further (to 3.5 percent) in 1984 and then to decline gradually in the next two years.

The deceleration in economic growth is reflected dramatically in the unemployment figures, with the average unemployment rate in 1982-86 projected to be more than double that in 1972-76. To give some idea of the relative magnitude of the problem in the two periods, the 1972-76 average unemployment rate of 4.2 percent equates to 13.5 million people, while the forecast average rate of 8.6 percent represents over 31 million jobless. Even though the unemployment rate at the end of the forecast period (8.2 percent) is expected to be lower than in 1982 (8.6 percent), the total number of people out of work will be almost unchanged due to growth in the industrial-country labor force.

MEDIUM-TERM PROSPECTS FOR THE INDUSTRIAL COUNTRIES*
(Average Annual Rates)



*Twenty-two countries listed in the "Key Indicators for Industrial Countries" table.

**Based on standardized unemployment rates for fifteen OECD countries; OECD data for 1972-1981.

†Consumer prices.

The rate of growth in consumer prices is forecast to average 7.4 percent in 1982-86, lower than in any five-year period since the beginning of the 1970's. Nevertheless, inflation is expected to accelerate modestly through 1985 from its nadir in 1983, before slowing again in 1986.

Individual country and regional economic trends will differ from the weighted-average picture painted above. Generally speaking, Japan is expected to continue outperforming the other industrial countries in all three areas, followed (fairly closely in terms of real growth and inflation) by the United States. The European countries as a group will fare worst in terms of these broad indicators.

The outlook for the industrialized economies is probably the single-most important variable bearing on the forecast for commodity prices in 1983. The outlook for commodity prices follows. ■

[4]Following a decline in real oil prices in 1982 and in 1983, this assumption allows for increasing real prices in the 1984-86 period.

OUTLOOK FOR COMMODITY PRICES

Prices for most commodities fell in 1982 from 1981 levels. An all-commodity price index, which does not include oil, fell at double-digit rates for the second year in a row, but some recovery is expected in 1983. Oil prices declined in 1982 and are forecast to show little change in 1983.

ALL COMMODITIES

Commodity prices, excluding crude oil, declined an estimated 12.1 percent during 1982, following a 14.7 percent drop in 1981.* These declines were the largest since the 18.2 percent drop during the 1974-75 recession. A number of factors caused this decline in commodity prices. First, the world economy experienced a deep recession during much of 1981 and 1982. The recent decline in real economic growth resulted in a dramatic decrease in the demand for commodities and, as a result, lower prices. Second, the supply of many commodities, particularly agricultural, significantly increased over the past two years. This development was primarily due to higher relative prices in the past and more favorable weather conditions in many parts of the world. Simultaneously, rising real interest rates during 1981 and much of 1982 raised the opportunity cost of holding large private commodity inventories. Combined with less optimistic price expectations, the higher real interest rates led to a reduction in private inventories, which added to the increase in total supply. Finally, all commodity prices were converted into U.S. dollars before entering the price index. The appreciation of the U.S. dollar during 1981-82 causes the various price indexes to overstate the extent of the price decline.

Prices for some commodities were affected by international commodity agreements, which were operating during 1981 and 1982. Commodities under such formal agreements include tin, coffee, cocoa and sugar. These agreements establish rules that attempt to control the supply of and demand for each commodity on international markets. The objective is to stabilize the price around some long-run trend, using export quotas, buffer stocks or a combination of two. Under current market conditions, export quotas have generally been reduced as governments purchased or withheld commodities from the market. As a result, government buffer stocks of these items were approaching record levels by the end of 1982. With the possible exception of coffee, these agreements were not successful in keeping these commodity prices from falling in 1982.

For 1983, overall commodity prices are forecast to increase 2.4 percent. During the first half of 1983, commodity price increases should be fairly modest, but they should accelerate during the second half. Average prices forecast for the 1983 fourth-quarter should be approximately 11 percent higher than those estimated for 1982's fourth quarter.

This 1983 commodity price forecast is based upon a number of key assumptions. First, the industrial economies are expected to expand at a real 2.4 percent rate. The higher real economic growth in 1983 in comparison to 1982 levels should lead to an increase in the overall demand for commodities. However, the increase in demand may not be equally distributed across each commodity group. Second, falling commodity prices during 1981 and 1982 lowered the relative price of some commodities, discouraging future production of those items in excess supply. Finally, lower real interest rates and more optimistic price expectations could lead to some limited private inventory building, thus decreasing supply.

After 1983, overall commodity prices are forecast to increase by more than the anticipated 1983 increase. Assuming normal weather conditions worldwide and higher real economic growth within industrial countries during the 1984-86 period, commodity prices should increase by 15-20 percent per year.

*Unless specified, all prices discussed are indexes calculated on an annual average basis.

COMMODITIES PRICE INDEXES — YEARLY AVERAGE
(1975 = 100)

	1979	1980	Percent Change 79-80	1981	Percent Change 80-81	1982E	Percent Change 81-82E	1983F	Percent Change 82-83F
All Commodities*	151.7	166.4	9.7	141.9	–14.7	124.8	-12.1	127.8	2.4
Food	102.2	137.0	34.1	118.0	–13.9	94.7	–19.7	97.2	2.6
Beverages	254.9	223.8	–12.2	174.0	–22.3	174.8	0.5	172.6	–1.3
Agricultural Raw Materials	168.2	175.1	4.1	158.0	–9.8	138.1	–12.6	148.3	7.4
Metals	155.9	172.5	10.6	148.7	–13.8	134.5	–9.5	133.3	–0.9

*The all-commodities price index uses U.S. dollar prices for thirty-four commodities exported by primary-producing countries. Individual item weights are based upon average export earnings during the 1968-70 period in 98 countries.

E = Estimate F = Forecast

MAJOR COMMODITY GROUPS

The food commodity price index makes up 31.4 percent of the overall commodity price index. The items included in this category are corn, wheat, rice, sugar, bananas, meats and oils. For 1982, food prices are estimated to have fallen by 19.8 percent. The single most volatile price was sugar's, which experienced an estimated 50 percent decline during the year. During the 1981-82 crop year, production of wheat, rice and other coarse grains reached a record 1.5 billion tons. Output expanded in most parts of the world except the Soviet Union and Eastern Europe. Additional demand from areas with reduced output will keep price declines for these crops to a minimum. Food prices are forecast to increase 2.6 percent during 1983.

The beverages price index, which makes up 18.2 percent of the overall commodity price index, includes prices for coffee, cocoa and tea. The index increased 0.5 percent during 1982. Due to high production levels, cocoa prices dropped almost 30 percent during 1982. The International Cocoa Agreement, which establishes export quotas, had little effect on 1982 cocoa prices. However, the agreement's effectiveness could improve during 1983 if the Ivory Coast, the world's single largest cocoa producer, decides to sign the agreement. The decline in cocoa prices was offset by a moderate increase in tea prices and stable coffee prices. For 1983, larger coffee and cocoa crops should cause a modest 1.3 percent decline in beverage prices.

Prices for cotton, wool, rubber, hides, jute and sisal constitute the raw agricultural materials price index, which makes up 22.5 percent of the overall commodity price index. In 1982, this index declined 12.6 percent. Cotton was the only item included in this index that experienced higher prices during 1982. End-of-year cotton prices rose an estimated 16 percent between 1981 and 1982. All other items in the index had declining prices. Agricultural raw materials prices in 1983 are forecast to increase 7.4 percent.

Finally, the metals price index, 27.9 percent of the overall commodity price index, covers prices for copper, iron ore, tin, aluminum, zinc, nickel and lead. Metals prices are estimated to have declined 9.6 percent in 1982, the result of a large drop in demand due to the particularly deep recession in manufacturing and construction sectors worldwide. Each item within the group experienced a sharp drop in demand. Copper prices fell an estimated 18 percent during 1982, while lead and nickel prices decreased 28 and 18.5 percent, respectively. Real expansion in the manufacturing and construction sectors must occur for any metal price recovery. While metals prices are expected to recover during the second half of the year, they are forecast to decline 0.9 percent during 1983, on average.

INTERNATIONAL CRUDE OIL PRICES

The average OPEC official sale price peaked in 1981 at $34.50 per barrel. During 1982, this average price declined to approximately $33.46 per barrel, a 3 percent decline. Total non-communist crude oil production during 1982 is estimated to have equaled slightly less than 38 million barrels per day while consumption equaled an estimated 39 million barrels per day. OPEC's 1982 output is estimated at approximately 18.3 million barrels per day, representing an 18.7 percent decline from 1981 output, in comparison to an 8.3 percent decline in non-communist world production. During 1983, average nominal crude oil prices are expected to remain fairly flat, with some possible downward price pressure during the second and third quarters.

The downward pressure on crude oil prices has been the result of both long-run and short-run economic forces. In the long run, the 118 percent increase in crude oil prices between 1979 and 1981 decreased the quantity of crude oil demanded and increased non-OPEC crude oil supply. The decline in quantity demanded has been the result of two factors. First, higher crude oil prices leads to improved energy efficiency. In industrialized countries, total energy consumption as a percentage of GNP declined 7 percentage points between 1979 and 1981. Second, higher relative crude oil prices cause a substitution of alternative energy supplies for oil. Among industrial countries, crude oil consumption as a percentage of total energy consumption declined 11.3 percentage points between 1978 and 1981. Furthermore, higher relative crude oil prices encouraged exploration in previously undeveloped areas, thus increasing supply. In 1980, the non-OPEC crude-oil-producing countries' share of world oil production equaled 44 percent; by the end of 1982, it rose to an estimated 54 percent.

In the short run, inventory changes and the rate of real economic growth in consuming countries can significantly influence prices. During 1982, for example, oil companies reduced inventories by an estimated 1 million barrels per day; in the first half of the year, the inventory drawdown was even larger. At the end of 1981, total world inventories equaled 100 days at current rates of consumption. By the end of 1982, inventories should have equaled an estimated 90 days. This inventory decline resulted from higher real interest rates and the expectation of lower future crude oil prices. At the same time, the length and depth of the recession in 1981-82 dramatically reduced the demand for crude oil. Total crude oil consumption declined 4.5 percent during 1981 and an estimated 4.2 percent in 1982.

The 1983 crude oil price forecast calls for fairly flat nominal prices. The average OPEC official sales price is expected to equal approximately $33.50 per barrel for the year. Total non-communist world production should amount to slightly more than 39 million barrels per day, a 4.5 percent increase, while OPEC production should increase to almost 20 million barrels per day. Total consumption should rise to approximately 39.5 million barrels per day, a 1 percent increase.

During the first quarter of 1983, spot prices for Saudi Arabia light should remain near the $34.00 per-barrel price. The lack of change results primarily from higher seasonal demand and limited inventory building by major oil companies due to lower real interest rates. The second and third quarters of 1983 will probably be more difficult for crude oil producers. The seasonal winter rise in demand will be over, putting some downward pressure on spot market prices; but the assumed acceleration in real economic growth during 1983 will increase crude oil demand, and prices should remain stable.

The possibility of a weaker recovery, however, would imply that spot prices could again decline below official prices. If this scenario occurs, a mid-year reduction in the official price of Saudi light becomes more likely. The persistent softness in spot prices would encourage the major oil companies to reduce purchasing oil on a contract basis and buy more crude oil on spot markets. If this type of pressure builds, the Saudis in cooperation with other Gulf producers would lower official prices 2 or 3 percent to maintain contract production levels at current levels. Then, during the fourth quarter of 1983, seasonal winter increases in demand and the economic recovery should keep spot market prices near official prices.

The long-run average price of crude oil is forecast to decline in real terms through 1984. By 1985, the real price of crude oil is expected to stabilize as demand for crude oil expands due to higher real growth rates in oil consuming countries. Small real price increases should begin again in 1986. These commodity price developments play an important role in determining world trade patterns, which is discussed in the next article. ■

OUTLOOK FOR WORLD TRADE

The lethargy in the world economy in 1982 exacted a continuing toll on world trade. For the third consecutive year, world trade, in inflation-adjusted terms, showed little or no growth. In 1983, however, the volume of trade should experience some solid growth because of a moderate recovery in the world economy. After a very marginal contraction in 1981, nominal trade declined by a much larger 6 percent in 1982, reflecting the pronounced fall in commodity prices and generally lower domestic inflation rates worldwide, in addition to the contraction in the volume of world trade. In 1983, the value of world trade is forecast to grow about 11.2 percent.

REAL TRADE GROWTH

The volume of world trade, measured by imports, increased a modest 2.3 percent in 1981, the result of a 0.6 percent decline in nominal trade and a 2.8 percent fall in import prices. The growth in the volume of world trade reflected the real growth occurring in the world economy, which was influenced to a large degree by the 1.5 percent growth of the industrialized economies of the OECD. The OECD economies account for more than three fourths of the non-communist world's economic output and more than 50 percent of its trade. As a group, they are a good variable for predicting changes in world trade volume.

In the second half of 1981, the industrialized economies entered a deep, prolonged recession which apparently continued throughout 1982. Collectively, the OECD economies are estimated to have experienced virtually no real economic growth in 1982. As a result, the volume of world trade is expected to have declined approximately 1.2 percent, a switch from 1981's relatively small positive growth rate.

In 1983, the OECD economies are forecast to grow about 2.4 percent; and the pace of economic activity in the world should quicken over the course of the year as the industrialized economies gain momentum and as their increased demand for imports leads to a recovery of the developing economies. Consequently, world trade volume should expand approximately 3.0 to 4.0 percent in 1983.

Given 3.5 percent growth in 1983, the volume of world trade is estimated to increase at a meager 0.9 percent compound annual rate over the first four years of the 1980s. By way of contrast, it increased at a compound 8.9 percent annual rate for the first four years of the 1970s and at a 6.3 percent annual rate for the entire decade of the 1970s.

NOMINAL TRADE GROWTH

In both 1981 and 1982, the value of world trade actually declined from year-earlier levels; the last time world trade fell in value was nearly twenty-five years ago, in 1958. In 1981, nominal trade decreased 0.6 percent from 1980 levels when the 2.3 percent increase in the volume of trade was more than offset by the 2.8 percent fall in import prices. In 1982, the value of world trade appears to have declined about 6 percent, a combination of a 1.2 percent contraction in the volume of trade and a 4.9 percent fall in import prices.

The nearly 5 percent fall in 1982 import prices reflects the decline in commodity prices and lower rates of increase in production cost for imports with a higher degree of processing. As noted in the previous article, commodity prices weakened substantially — by about 12.1 percent — in 1982, because of decreased demand, which led, generally, to excess-supply situations.

The lower rate of increase in prices for imports with a higher degree of processing resulted from weak demand conditions for both inputs and the products themselves, as reflected in lower domestic inflation rates. For the OECD economies collectively, for example, inflation rates fell about one fourth from 1981 levels, as lower rates of real growth reduced inflationary pressures and as many economies pursued anti-inflationary policies.

In 1983, world import prices are forecast to rise approximately 8 percent. The increase is a function of lower domestic inflation rates and modestly rising, rather than falling, commodity prices. Consumer prices in the OECD are forecast to rise about 7 percent in 1983, after

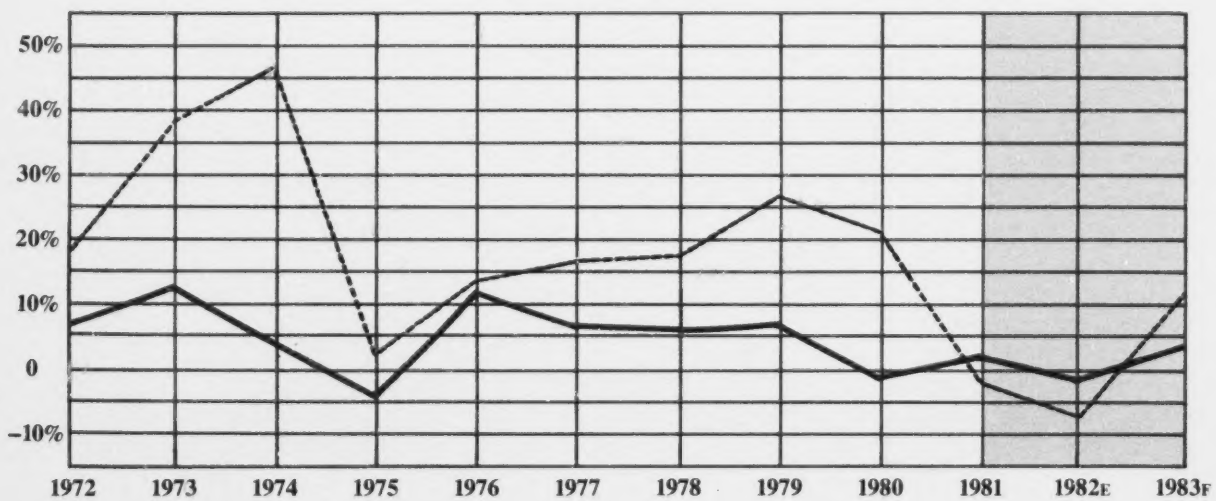
an estimated 7.8 percent increase in 1982, which indicates that prices for imports with a higher degree of processing should, in general, rise at a lower rate also. Commodity prices, on the other hand, are expected to rise about 2.4 percent, in comparison to 1981's 12.1 percent decline.

Assuming that nominal trade increases 11.8 percent in 1983 over 1982 levels, the value of world trade should equal approximately $2.0 trillion. The 6.5 percent compound annual increase in nominal trade during the first four years of the 1980s, compared to the 20.1 percent annual increase for the first four years of the 1970s, comprises mostly price rises. While the volume of trade should grow at a 0.7 percent annual rate, prices are expected to rise 5.6 percent annually. Over the first four years of the 1970s, import prices rose by a significantly larger 10.2 percent annually.

Over the five-year period, 1982-86, the volume of world trade should grow approximately 3.0 percent annually, on average, reflecting that the 1980s are likely to be considerably less dynamic than the 1970s. At the same time, import prices should rise only about 9 percent annually, a lower rate than in recent years. As a consequence, the value of world trade is expected to increase about 13.9 percent annually over the 1982-86 period, implying that many economies posting enviable successes on the basis of export-led growth during the 1970s should anticipate more modest results during this decade.

The estimate for trade growth in 1982 and the forecast for 1983, which depend to a large extent on real economic growth in the industrialized economies, bear heavily on the outlook for the developing nations. The ability of the less-developed nations to continue to progress economically is enhanced by vigorous world trade growth. Thus, economic prospects are considerably better in 1983 than in 1982. The following article presents the outlook for the economies of the developing nations. ■

PERCENTAGE CHANGES IN REAL AND NOMINAL WORLD TRADE*
1972-1983



Real
Nominal
E = Estimate
F = Forecast

*Measured by annual merchandise imports for IMF members.

OUTLOOK FOR THE DEVELOPING WORLD

The recession in the industrial countries has played a major role in the economic performance of the developing world in the past two years. In 1981, high interest rates, decreasing trade flows and volatile exchange-rate movements severely hampered the growth of demand for developing-country exports and, therefore, the overall economic progress of these countries. The absence of the widely-forecast 1982 recovery in the U.S. and other industrial economies added to the depressing factors facing the developing economies. The exceptionally strong U.S. dollar exacerbated the problems created by the weakness of external demand by increasing the cost of industrialization programs in many developing countries and intensifying burdensome financial strains associated with the fall in output and earnings.

Nevertheless, the developing world has shown an improving ability to deal with some of the less-desirable forces originating in the industrialized economies. The World Bank in its *Annual Report* for fiscal 1982, found that the "resilience of many developing countries in a depressed external environment has been impressive." For some of these countries, more resilience has come from further diversification of exports and export markets in tandem with more sophisticated planning and policy management.

The economies of the developing world differ considerably. Thus, in presenting the outlook for the developing world, the developing economies have been categorized into major oil-exporting countries and non-oil-exporting countries. The major oil exporters are further subdivided into *oil-exporting* and *net oil-exporters*. The non-oil-exporting countries are broken down into *newly-industrialized countries* (NICs), *potential NICs*, and *other commodity exporters*.

THE OUTLOOK FOR THE MAJOR OIL-EXPORTING DEVELOPING COUNTRIES

Changes in the price and output of crude oil have a dramatic impact on the overall economic performance of oil-producing, developing countries. The average price of crude oil is estimated to have declined 3 percent during 1982, while the worldwide production of crude oil declined approximately 8.3 percent. However, production in this group dropped by slightly more than 12 percent during 1982. As a result, the group's current-account balance deteriorated dramatically and real economic growth declined. The 1983 forecast calls for stable, average crude oil prices and a 4.5 percent increase in worldwide crude oil production. These developments in crude oil markets should prevent further deterioration in the group's current-account balance and lead to a small increase in real economic growth.

This group of countries is divided into two categories: *oil-exporting* and *net-oil exporters*.* The oil-exporting countries include Algeria, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Oman, Qatar, Saudi Arabia, the United Arab Emirates and Venezuela. Each of these country's net crude oil exports represent two thirds or more of its total exports and equals at least 1 percent of annual world crude oil exports. The remaining oil-producing developing countries are classified as net-oil-exporters, which includes Bahrain, Bolivia, the Congo, Ecuador, Egypt, Gabon, Malaysia, Mexico, Peru, Syria, Tunisia, and Trinidad and Tobago.

*This classification is used by the International Monetary Fund. Also, much of the data used in this study's calculations come from the IMF.

THE OUTLOOK FOR OIL-PRODUCING DEVELOPING COUNTRIES

Current-Account Trends

During the 1979-80 period, average crude oil prices increased 106 percent. This large price increase was principally the result of two factors. First, OPEC crude oil production decreased 2.9 million barrels per day between 1978 and 1980. The decline was concentrated in Iran and Iraq, where combined production dropped 3.6 million barrels per day. This contraction occurred because of the 1979 Islamic revolution in Iran and the start of the Iraq-Iran war during the fall of 1980. Second, due to growing uncertainty associated with future world supplies of crude oil and low crude oil inventories, the demand for crude oil increased significantly.

As a result of these developments, the 1980 aggregate current-account surplus for oil-exporting developing countries reached a record $109 billion in 1980, a 56 percent increase over the 1979 surplus. For the net-oil exporters, their aggregate current-account deficit reached $11 billion in 1980, a $2.5 billion deterioration over the 1979 deficit. Since net crude oil exports represent a smaller percentage of total exports in the second category of countries, the increased value of crude oil exports was outweighed by expanding imports.

From 1980 through 1982, the current accounts of the major oil-exporting developing countries steadily deteriorated. For the oil-exporting countries, the 1982 aggregate current-account deficit is estimated to equal $1.2 billion, and the 1983 deficit is forecast at $0.5 billion. The net-oil exporting countries 1982 aggregate current-account deficit equaled $25.2 billion and is forecast to reach $26 billion in 1983.

Focusing on the oil-exporting countries, where the current-account deterioration has been more dramatic, the trend appears to be similar to the 1974-78 period, but the causes differ. Following the 233 percent increase in crude oil prices in 1973-74, the aggregate current-account of oil-exporting countries reached a $68.3 billion surplus in 1974. From 1975 through 1977, it averaged $35.5 billion before declining to $2.9 billion in 1978. Total crude oil production within these countries, however, remained above 30 million barrels per day over the entire period. The reduction in the current-account surplus resulted from an increase in the group's ability to absorb imported goods and services to a level approximately equal to crude oil export revenues. Imports by volume grew 41.4 percent in 1975, 20.6 percent in 1976 ar. 15.2 percent in 1977. The depreciation of the U.S. dollar during this period aggravated the situation.

KEY ECONOMIC INDICATORS FOR THE MAJOR OIL-EXPORTING DEVELOPING-COUNTRY GROUP

OIL-EXPORTING DEVELOPING COUNTRIES

	1980	1981	1982E	1983F
Current Account (billions of U.S. dollars)	109.1E	53.7E	–1.2	–0.5
Inflation Rate (percent)	12.6	11.8	10.5	10.0
Real GDP Growth (percent)	–2.8	–4.5	–1.0	1.0
NET OIL-EXPORTING DEVELOPING COUNTRIES				
Current Account (billions of U.S. dollars)	–11.0	–20.6	–25.2	–26.0
Inflation Rate (percent)	24.2	24.6	36.6	30.0
Real GDP Growth (percent)	7.3	6.6	4.0	5.0

E = Estimate F = Forecast

The more recent decline in the oil-exporting country's current-account surplus was primarily caused by the decrease in crude oil export volume and prices. Previous large price increases and the 1981-82 recession have caused a decline in oil consumption in industrial countries. As a result, the volume of crude oil exports from these countries declined 12.8 percent in 1980, 16.3 percent in 1981 and an estimated 9.0 percent in 1982. In addition, the average crude oil price is estimated to have declined 3 percent between 1981 and 1982. From 1980 through 1982, imports of goods and services have grown an average of 14 percent per year, below past annual averages. This fact implies that the combined oil price and volume decreases have been the primary cause of the second decline in the aggregate current-account balance, rather than rapidly growing imports.

The 1983 current-account forecasts are based on a number of factors. First, average crude oil prices are forecast to remain fairly flat and average approximately $33.50 per barrel. Second, worldwide crude oil production is expected to increase 4.5 percent, while production in the oil producing developing countries should expand by almost 7 percent. The combined effect should result in an increase in export revenues. Third, even though domestic monetary and fiscal policies are expected to be less expansionary in 1983, particularly in the oil-exporting countries, imports of goods and services will continue to grow and partially offset the expansion in export revenues.

From 1984 through 1986, the aggregate current-account position of the major oil-exporting countries should improve modestly, assuming crude oil prices and production gradually increase due to higher real economic growth in oil-consuming countries. Furthermore, the major oil-exporting countries as a group should reduce imports of goods and services due to more moderate growth in export earnings.

Real Growth Trends

The decline in crude oil production has led to a deep contraction within the petroleum sector of the major oil-exporting countries, which tends to bias overall growth rates downward, particularly in the oil-exporting countries where this sector is very large. From 1980 through 1982, real growth in GDP has averaged –2.8 percent in the oil-exporting countries. This poor growth performance was the result of declining crude oil production, and in 1982, a reduction in goverment expenditures. Ignoring the oil sector contraction, growth in the non-oil sectors averaged 4.8 percent annually over the 1980-82 period. The oil sector experienced a –12.3 percent growth rate over this period. Crude oil production equaled 26.9 million barrels per day in 1980, and by 1982 it equaled only 18.3 million barrels per day.

For most of the countries in this category, the revenues from crude oil production accrue to the central government. The government then spends them on both investment projects and consumer goods, the latter is usually in the form of subsidies. Since the export-revenue decline, planned expenditures were adjusted downward in order to avoid or reduce budget deficits, with the largest cuts taking place in the public investment areas.

An examination of the net-oil exporters shows a quite different situation. The group experienced rapid real growth in gross domestic product between 1980 and 1982. The growth rate averaged approximately 6 percent over the period. Since the petroleum sector share of GDP is smaller than in the oil-exporting countries, the decline in crude oil production had a smaller overall impact. Certain members in this group also followed expansionary monetary and fiscal policies, which helped maintain the high growth rates.

The 1983 outlook calls for a modest recovery within the major oil-exporting countries. For the oil-exporting countries, real growth is forecast to reach 1 percent compared with –1.2 percent in 1982. A 7 percent crude oil production increase is expected to be the primary source of the higher growth rate. The net-oil exporters' real growth rate in 1983 is forecast to equal 5 percent compared with approximately 4 percent in 1982. Again, increasing crude oil production and exports should lead the recovery.

During the 1982-86 period, the annual real growth rate of oil-exporting countries should average 2.3 percent per year. This higher growth rate will principally be the result of a gradually expanding petroleum sector. Net-oil exporting countries should continue to experience growth rates similar to their current average rates.

Inflation Trends

The inflationary experiences of major oil-exporting countries varies significantly between countries in this group. From 1980 through 1982, the average annual rate of inflation in oil-exporting countries was estimated at 11.6 percent, as it declined from 12.6 to 10.5 percent over the three-year period.

For the oil-exporting countries, the average annual rate of inflation was significantly lower during the 1980-82 period than in the middle of the 1970's. Between 1974 and 1977, the average annual inflation rate equaled 17 percent, reaching a peak of 18.8 percent in 1975. Two factors caused this high inflation rate. First, the dramatic increase in crude oil export revenues led to a massive increase in government expenditures for both large public infrastructure projects and consumer subsidies. As a result, money supply growth increased sharply. Second, because the basic infrastructure for many of these countries was small and undeveloped, physical bottlenecks occurred, putting additional upward pressure on prices.

The decline in the annual rate of inflation during the 1980-82 period has been principally the result of improved control over government expenditures leading to a lower money supply growth rate and a more fully developed infrastructure. For 1983, the oil-exporting countries' inflation rate is forecast to equal 10 percent. This decline will be due to continued moderate money supply growth and the increase in real economic growth.

The average annual inflation rate for net-oil exporters is estimated to have equaled 28.5 percent during the 1980-82 period. The inflation rate was 12.4 percentage points higher in 1982, as compared to its 1980 level. Moreover, the wide range of inflation rates between the individual net-oil exporting countries makes the interpretation of an overall inflation rate for this category of countries difficult. For example, Mexico's average annual rate of inflation since 1981 has exceeded 80 percent, pulling the total rate up significantly. Excluding Mexico, the overall rate of inflation would be below 20 percent per year. Given the fairly high real growth rates within these countries, the inflation rate has been primarily the result of rapid money supply growth. The 1983 forecast calls for an overall inflation rate of 30 percent. The lower overall rate of inflation should be the result of reduced government expenditures and slower money supply growth.

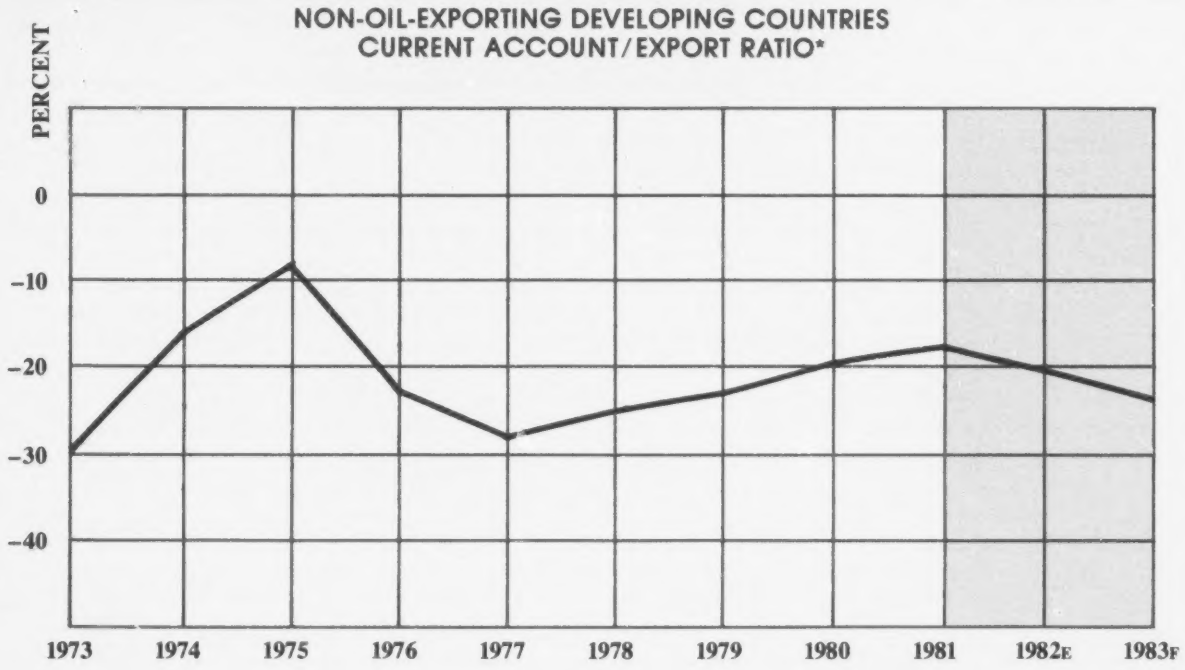
THE NON-OIL-EXPORTING DEVELOPING COUNTRIES

In comparison with the 1973-74 and 1979-80 oil price "shocks," the overall strains on the external positions of the non-oil-exporting developing countries have been less severe. As shown in the "Non-Oil-Exporting Countries' Current-Account" chart, the dislocation in the trade positions of these countries was far more extensive after the first oil price hike than after the second. Of particular interest is the even smaller increase in the percentage of current-account deficits to exports resulting from the 1981-82 worldwide recession. Therefore, while the recent decline in industrial-country economic growth spread directly to the non-oil-exporting developing world as it did in the 1970s, the estimated improvement in the 1982 ratio suggests that structural and policy adjustments to changing external conditions have taken place since the early 1970s.

Newly Industrialized Countries (NICs)

The NICs are economies that have effectively devoted their ample productive inputs, in the form of human and/or natural resources, to the construction of economic and industrial infrastructures. They have established powerful manufacturing sectors that supply their own domestic markets, as well as the markets in industrial countries. As a result, the NICs have lessened the proportion of non-oil primary exports to total exports, thus relying more on manufactured products for their export earnings. In fact, approximately 50 percent or more of a NIC's exports are manufactured. This development has reduced the vulnerability of these countries to the effects of the more volatile commodity prices and has enabled them to carve out a strong export position within external markets. It has not, however, fully insulated them from declines in world trade of the proportions seen in 1981 and 1982.

The NICs collectively faired better than the rest of the non-oil-exporting developing world during the decade of the 1970s, enjoying a GDP-weighted average real growth rate of 7.1 percent. Overall real growth in the NICs was 0.3 percent in 1981, improving slightly to an estimated 1.6 percent in 1982. The aggregate GDP of the NICs equals approximately half that of Japan.



*Ratios of current-account balances to exports of goods and services for individual countries, averaged on the basis of current exports of goods and service weights.

E = Estimate F = Forecast

Source: International Monetary Fund and SPNB forecast.

The performances of individual NICs differ greatly during strained economic periods such as the current one. Distinctions arise, for example, from differences in export composition, debt and debt management, and oil dependency. Asian NICs, which include South Korea, Singapore, Hong Kong and Taiwan, have been able to sustain higher rates of real growth than the Latin American NICs, Brazil and Argentina, as evident in the "Key Indicators" table for the NICs and potential NICs.*

The disparity in growth rates can be partially attributed to the tightening of monetary and incomes policies designed to combat persistent current-account deficits and high inflation rates in the Latin American NICs. Furthermore, more restraint was needed because of the numerous devaluations implemented to improve export competitiveness, which initially led to increased inflation rates via higher import prices. Thus, growth in these economies was hurt by both the decline in world trade and domestic policies. In the case of Brazil, the high cost of servicing a large external debt, accumulated during periods of expansion, has squeezed the resources available for investment. In addition, restrictive monetary policies in the United States and other net-lending countries increased the cost of servicing existing loans, a situation worsened by the continued strength of the U.S. dollar.

In the case of the Asian NICs, real GDP growth rates fell during 1982 to an estimated 4.2 percent, again a result of weak export demand in the industrial countries and domestic policies geared toward reducing inflation rates and maintaining more favorable terms-of-trade. The generally smaller debt burdens in the Asian NICs in comparison to those of Latin America, however, have eased the challenges inherent in the economic management of these countries. The forecast 1983 recovery in the industrial countries, albeit a slow one, is expected to stimulate production for export, eventually leading to gradual growth in consumption in the domestic markets. Although real growth rates in the Asian NICs

*The other NICs are South Africa, Portugal and Israel.

is forecast to improve modestly in 1983, prospects for the medium term indicate a stronger and steadier growth path.

Potential NICs

Apart from the industrial countries, the NICs, and the major oil-exporting countries, the rest of the world is dependent on non-oil commodity exports for the majority of their export earnings. The relatively greater susceptibility of commodity prices to income trends in developed countries and the limited market for these goods has resulted in more volatile exports earnings for these countries. The poor 1981-82 performance of non-oil exporting countries was in fact, the culmination of a period during which import prices were rising far more rapidly than export prices.

Among the non-oil commodity-exporting countries, however, some economies have displayed greater ability to become more industrialized than have others. Those countries likely to become NICs by 1990 are categorized as "potential NICs." Examples are Chile, Colombia, Thailand and the Philippines. A number of factors support this potential. In some countries, manufacturing sectors have become increasingly buoyant as per capita incomes have grown, drawing more of the population into the economic mainstream. This process has laid the basis for the expansion of a manufacturing sector large enough to diversify the domestic product base for internal consumption as well as for export. Moreover, these economies have been enlarging productive capacity through continued capital investment. A growing skilled labor pool also is evident in many of these countries, and several are strongly endowed with natural resources. The potential NICs' aggregate GDP is approximately 75 percent of that of the NICs.

As an aggregate, the potential NICs have weathered the current slowdown in world trade better than other selected country groupings. Although the real rate of growth in these countries slid to 4.2 percent in 1981 and is estimated to have fallen further to 2.9 percent in 1982, growth in these countries was considerably better than those of the industrial economies and NICs as a whole. Furthermore, the potential NICs' inflation-rate performance was far better than that of the NICs, indicating that short- and medium-term growth policies will be less hindered by the need to impose corrective monetary policies.

Outlook for 1983

For the near term, the United States, Japan and other major industrial countries can look forward to unspectacular rates of economic growth. For the NICs, this fact translates into less economic "pull" from exports, given their heavy reliance on the industrial countries' export markets.

Thus, real annual growth rates for the majority of the NICs will be higher, but restrained. More sophisticated economic management and greater export diversity will assist these countries in adjusting to this change. Overall, the real growth rate of the NICs is forecast to rise to 3.0 percent in 1983, while the potential NICs, also less restrained by the large debt-service burden of many NICs, are expected to grow 3.8 percent in real terms.

The inflation rate for the NICs is forecast to decline in 1983 to 62.9 percent from an estimated 68.7 percent for 1982, primarily due to domestic economic policies in the Latin American countries designed to correct the results of chronic inflationary biases. Although the Asian NICs' inflation rate is projected to increase to 14.5 percent, it is low in comparison to the other two sub-groups.

Current oil price trends should generate some optimism for the NICs' and potential NICs' merchandise-trade accounts and, thus, their current-account balances. But with the 1983 rebound in the industrial countries expected to be initially weak and to strengthen as the year progresses, the demand for the exports of the NICs and potential NICs is expected to remain depressed for the early part of 1983. For the NICs, these trends should result in a net improvement as their aggregate current-account deficit narrows to a forecast $16.6 billion. The potential NICs' current-account deficit, however, is not expected to decline much, particularly because commodity price improvements generally lag economic recovery.

Outlook for 1982-86

Given recent trends, protectionism appears to be on the rise, which has important implications for the intermediate outlook. As the world economy begins a sustainable expansion and as competition increases, proponents of protectionism are likely to become more vocal in a trade-linked world economy. The industrial countries are faced with structural problems as a result of their dependence on "smoke-stack" industries for a major part of their output. Since many of these industries are no longer competitive, the use of traditional

stimulative policies to solve many difficulties will be inefficient. On the other hand, the NICs and, to a much lesser extent, some of the potential NICs have the advantage of having put into place large industrial establishments within the recent past. Over the 1982-86 period, these countries will confront the increasing protectionist pressures from the industrialized economies. The number of NICs and potential NICs and their strong competitive position, however, will make it difficult for the industrialized economies to institute effective barriers. Thus, the NICs and potential NICs should progress despite increased protectionist pressures.

For the 1982-86 period, the forecast calls for the NICs' real growth to reach an average rate of 5.1 percent by the end of the period. Growth rates should be even higher toward the end of the decade.

A more impressive improvement is expected for most of the NICs with regard to inflationary trends and their current-account balance. Favorable import prices, in addition to more restrictive monetary and fiscal policies, will moderate the NICs' domestic inflation rates over the next five years. The 1982-1986 forecast of the aggregate inflation rate for the NICs should ease to approximately an annual average of 50 to 55 percent, a considerable improvement from the 73 percent inflation rate in 1981.

Less external inflationary pressures and lower interest rates combined with more closely controlled domestic import demand are forecast to have favorable effects on the NICs' current-account balances. In addition, International Monetary Fund packages and domestically-imposed policies are being developed and/or implemented to keep imports under tight control. Combined with gradual improvement in export demand, the NICs' current-account deficit should be cut by two thirds by 1986 from the $32 billion recorded in 1981.

From an intermediate-term perspective, the real growth rates of the potential NICs are likely to exceed those of the other country groupings, including the industrial countries, the NICs, the major oil-exporting economies and the rest of the developing world. Growth for the potential NICs is expected slowly but steadily to accelerate, nearing 5.9 percent in 1986. These growth trends, however, will be aggravated by inflationary pressures and a climbing debt-service ratio, the latter stemming from borrowing needed to raise investment capital. By 1990, the potential NICs' debt-service ratio is expected to rise from 18.2 percent in 1980 to 25 percent, compared to the NICs' 33.7 percent in 1980 and a lower 27 percent by 1990.

The upward pressure on inflation is expected to reverse the 1982 improvement and slowly push the rate upward during the 1982-86 period. The annual average for the potential NICs' inflation rate over the five-year period under review is forecast at approximately 19 percent. The forecast of the potential NICs' current-account balance shows a similar trend. Rising capital-goods imports for use in industrial development will aggravate the trade deficit, eventually leading to a forecast $23 billion deficit by 1986.

KEY INDICATORS
NICs and Potential NICs

	Real Economic Growth (Percent)			Inflation (Percentage Change)			Aggregate Current Accounts* (Billions of U.S. Dollars)		
	1981	1982E	1983F	1981	1982E	1983F	1981	1982E	1983F
NICs	0.3	1.6	3.0	73.0	68.7	62.9	–32.1	–28.3	–16.6
Latin America	–3.9	0.5	2.4	105.3	101.9	92.7	–15.8	–14.0	–9.0
Asia	8.0	4.2	5.6	18.7	7.1	9.9	–5.7	–2.5	2.6
Other	4.0	1.8	1.4	38.9	40.8	35.7	–10.6	–11.8	–10.2
Potential NICs	4.2	2.9	3.8	18.9	14.1	14.5	–18.2	–15.5	–15.3
Latin America	3.3	–1.3	2.6	24.5	20.9	16.5	–7.5	–6.2	–5.2
Asia	4.6	3.8	3.9	12.9	6.9	7.7	–8.3	–7.5	–8.9
Other	4.0	4.5	5.0	36.6	35.0	40.0	–2.4	–1.8	–1.2

E = Estimate F = Forecast
*Hong Kong is not included in the Aggregate Current Account calculations.

OTHER COMMODITY EXPORTERS

The majority of developing countries are neither oil exporters, NICs, or on the brink of becoming NICs. The economies of developing countries outside these categories are significantly less diversified, and economic activity in a very large proportion of them is dominated by agriculture. Many of these developing countries are greatly dependent on exports of a single commodity or a small number of commodities. In addition, exporting capacity frequently is very limited.

The trade sectors of these countries are extremely susceptible to cyclical swings in world markets. For example, even single-commodity exporters can benefit greatly if that commodity's price rises to high levels. Nevertheless, during periods of great economic buoyance, the economic benefits of increasing export earnings can be dissipated by these countries' structural rigidities, which impede the efficient absorption of export earnings into investment. On the other hand, commodity price declines accompanying world economic slowdowns severely imperil these countries' economic progress.

These patterns are evident in the recent economic performance of this developing-country group. Total exports of such nations fell in both 1981 and 1982, after growing relatively rapidly in the two previous years. In view of the delayed recovery of the industrial world and generally low commodity prices, it is doubtful that any significant increase in exports will occur in 1983. The growth of economic output in those nations, accordingly, fell to less than half the long-run average in 1982 and declined in per capita terms.

The problems associated with a high vulnerability to commodity price developments are especially acute among the low-income countries of Sub-Saharan Africa and South and Southeast Asia. The economic output of these countries always expands at the lowest annual rate of all developing countries. The World Bank recently reported, for example, that per capita incomes in Sub-Saharan Africa either did not expand or actually declined in the year ending June 30, 1982, continuing a pattern that has persisted without interruption since 1977. The overall growth performance followed a sharp decline in exports in 1981.

The long-run outlook for these commodity-exporting and low-income countries does not include prospects that the factors that historically have impeded their economic growth and diversification will disappear. Nevertheless, the World Bank and other official lenders place significant emphasis on relieving capital-scarcity constraints confronting these economies, and this fact considerably brightens the long-run outlook of this group of nations.

Just as economic conditions in the industrialized economies in 1981 and 1982 have directly and indirectly influenced the economies of the developing world, they have played an important role in the evolution of the external borrowing climate faced by the developing world. The next article takes up the outlook for developing-world finance.■

OUTLOOK FOR DEVELOPING-COUNTRY FINANCE

The financial dimensions of the strains affecting the developing world's economic performance have grown considerably from about 1980 to the present. The number of countries that have experienced debt-servicing difficulties has increased markedly, and some are unable to make any payments on their external debts. The result has been a plethora of requests by developing countries for financial assistance from the International Monetary Fund (IMF) and a surge in actual and impending negotiations for rescheduling of debt owed to international banks and other lenders.

The economic performance of many developing countries will, to a large extent, depend directly on the outcomes of such negotiations. Developing countries will also be affected by the impact of the negotiations' outcomes on lender confidence, even countries not seriously strained financially at present. Moreover, the ability and willingness of the IMF and other official lenders to provide the large amount of assistance required may be tested during 1983. Finally, the quality and effectiveness of domestic economic management will have a powerful impact on both questions of confidence and actual economic performance.

FINANCIAL NEEDS OF DEVELOPING COUNTRIES

The external financial requirements of the developing world are very large. As shown in the "External Financial Requirements" table, an estimated $155 billion in new capital was required in 1981 simply to offset the aggregate current-account deficit and meet principal repayments of 97 developing countries included in the World Bank external-debt-reporting system. This amount was 19 percent higher than that of 1980. Only a fraction of the total was met by financial flows not adding to the external debt of these countries. Part of the $155 billion came from official transfers (foreign aid), which amounted to $13.2 billion, and direct investment, about $15 billion, while approximately $6.7 billion was derived from the utilization of international reserves holdings.

Nevertheless, $116 billion in new long-term loans were disbursed, and $25 billion is estimated to have been added to short-term debt. IMF loans and credit from foreign monetary authorities totaled $5.4 billion, a record amount. Even so, substantial payments arrears accumulated, as some fourteen countries sought rescheduling of about $5 billion in debt owed to commercial banks and over $300 million owed to multilateral institutions, foreign goverments, and other official lenders.

The financial requirements of developing countries did not diminish greatly in 1982, even though the group's aggregate current-account deficit narrowed. That narrowing resulted mainly from a drop in imports, as several countries tightened import controls, offsetting a smaller decline in aggregate exports. New long-term loans declined to $99 billion in 1982, and net additions to short-term debt declined to about $15 billion. Credit from both the IMF and the Bank for International Settlements and assistance from central banks in industrial countries set yet another record.

The role of international commercial banks has come to be of crucial importance to the financial position of developing countries. In 1981, for instance, financial-market lenders (chiefly commercial banks) are estimated to have supplied $50 billion in new medium- and long-term loans to public sectors and $29 billion to private sectors. They also provided most of the $25 billion in new short-term credit and renewed $140 billion in existing short-term credit.

The fact that the pace of bank lending slowed considerably in 1982 is significant not only to the 1982 performance of the developing-country group, but also to the outlook for 1983. This slowing is generally held to have stemmed from concerns that the financial problems being experienced by Argentina, Mexico and other countries might spread. The slowing of lending activity

DEVELOPING WORLD EXTERNAL FINANCIAL REQUIREMENTS AND SOURCES

(Billions of U.S. Dollars)

	1980	1981P	1982E	1983F
GROSS FINANCIAL REQUIREMENTS	129.8	154.5	150.5	138.2
Aggregate Current-Account Deficit, before Official Transfers	89.3	104.0	89.9	77.0
Principal Amortization on Medium- and Long-Term Debt	40.5	50.5	60.6	61.2
Public Sectors	26.0	34.5	43.8	44.2
Financial Markets	*15.8*	*26.6*	*30.0*	*31.2*
Private Sectors	14.5	16.0	16.8	17.0
OFFSETS:				
Official Transfers	12.7	13.2	14.0	15.5
Direct Investment	11.0	15.0	15.6	15.1
Use of Reserves*	–11.6	6.7	6.3	–6.0
Medium- and Long-Term Loans	99.3	116.0	99.1	96.5
Public Sectors	72.1	87.5	79.1	73.5
Official Sources	*27.3*	*32.8*	*36.4*	*36.8*
Suppliers	*4.0*	*5.1*	*5.7*	*5.5*
Financial Markets	*40.8*	*49.6*	*37.0*	*31.2*
Private Sectors	27.2	28.5	20.0	23.0
SDR Allocations, etc.	1.9	–0.1	—	1.5
Reserve-Related Facilities, net **	1.7	5.4	9.0	8.0
Short-Term Debt, net	19.1	24.7	14.8	7.6
Errors and Omissions***	–4.3	–26.4	–8.3	—

*(–) Implies an increase
**IMF facilities and short-term loans between central banks
***Including capital flight, omissions in coverage, etc.
P = Preliminary E = Estimate F = Forecast
Sources: IMF, World Bank, and SPNB estimates and forecasts.

appears to have been more pronounced for European and Japanese banks than for U.S. banks. Both long- and short-term lending are estimated to have been affected. Estimates of net, new long-term lending to public sectors indicate that it dropped from $23 billion in 1981 to $7 billion in 1982. Furthermore, total net long-term lending to private sectors is estimated to have fallen from $13 billion to $3 billion during that period, although as noted, not all such lending is by commercial banks.

THE 1983 OUTLOOK

As 1983 opens, the future lending attitude of commercial banks is a major unanswered question. That attitude will doubtless be affected by the progress of several commercial-debt rescheduling negotiations taking place in late 1982 and early 1983. Some of the debt "work-out" efforts are so large as to assure that negotiations will be lengthy. Additionally, the role that can be played by the IMF and other official bodies is feared by many to be overwhelmed by the scope of the problem. Available IMF resources, reportedly, could be exhausted by the end of 1983. Finally, the willingness and ability of economic managers in developing countries to follow policies that will restore or maintain the confidence of lenders remain unknown quantities.

As discussed in previous articles, the world economic outlook is for stronger growth in industrial countries in 1983. Commodity prices will be higher, on average, in 1983 than in 1982, and the growth of world trade will have a beneficial impact on manufactured-goods exports from developing countries. These trends will

develop slowly, however, and the growth of developing country exports is estimated at only 10 percent, following declines in both 1981 and 1982. Import growth for these countries will probably remain modest, given the controls on imports that many developing countries are expected to maintain through 1983. Finally, the net deficit on services is expected to be narrowed by declining interest-rate levels.

The aggregate current-account deficit of this group of countries, therefore, is expected to record a $12-13 billion improvement. As a result, the gross external financial requirements of developing countries will be about $138 billion, $12 billion less than in 1982. Principal payments are assumed to be at least as high in 1983 as in 1982, even assuming some principal rescheduling to future years.

Outlook For Bank Lending

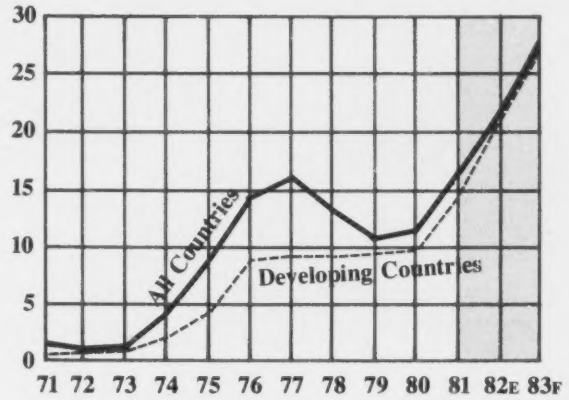
Even though commercial international asset growth slowed during 1982, it is apparent that the slowing was not restricted to developing countries. In addition, the slower growth of bank lending did not pertain to all developing countries. Each country's economic situation has its own unique aspects, making it difficult to formulate general explanations of the recent trend for bank's external asset growth; this fact is evident in lending patterns.

Although the aggregate or composite financial situation of developing countries will improve in 1983, individual country situations will be very dissimilar. The source of the problems for certain countries — low oil prices in the case of Mexico, for instance — will benefit others, such as Brazil. Export growth and economic progress will also be affected by structural factors, such as the commodity composition of exports and dependence on manufactured goods exports. Finally, economic management will not be equally effective in all countries.

At the same time, the international banking system is developing better monitoring systems and mechanisms for anticipating and responding to differing economic performances of individual developing countries and changing circumstances. Nevertheless, the volume of bank lending to developing countries may decline in 1983. Any reduction would, however, result more from the diminished need of the majority of developing countries and from the efforts of countries experiencing serious problems in 1982 to limit their net foreign borrowing in 1983, than from any abandonment of foreign lending by commercial banks. The worst of the

USE OF INTERNATIONAL MONETARY FUND CREDIT, NET OUTSTANDING AT YEAR-END, 1971-83

(Billions of U.S. Dollars)



E = Estimate F = Forecast

strains resulting from the stagnation of trade, past oil price hikes, and high interest-rate levels have passed. Hence, developing countries will have to borrow less for balance-of-payments purposes.

The Outlook for Official Lending

The forecasts presented in the "External Financial Requirements" table also assume continued, substantial lending by multilateral agencies and by governments. In its 1982 *Annual Report*, the World Bank estimated a 20 percent increase in bank and International Development Association disbursements in both 1981 and 1982. Even the conservative estimate given in the table that total official disbursements remain basically level in 1983 is consistent with the foregoing discussion of a reduced volume of lending by commercial banks and other private lenders.

The key to the ability of developing countries to obtain their total financial requirements in 1983 may ultimately be the ability of financially troubled countries to obtain IMF assistance and the IMF's ability to provide that assistance. The liquidity position of the IMF has in some views become strained by current world financial problems.

DEVELOPING WORLD EXTERNAL DEBT
(Billions of U.S. Dollars)

	1980	1981P	1982E	1983F
Medium- and Long-Term Disbursed Debt				
Public Sectors	315.5	368.5	403.8	433.1
Financial Markets	*154.9*	*177.9*	*184.9*	*184.9*
Private Sectors	76.5	89.0	92.2	98.2
Short-Term Debt	115.5	140.2	155.0	162.6

P = Preliminary E = Estimate F = Forecast

Sources: IMF, World Bank, and SPNB estimates and forecasts.

The IMF was similarly affected by the first oil price shock and the world recession in 1975-77 following shortly thereafter. In addition, the Fund estimates that a substantial long-term erosion of the value of IMF resources in real terms has occurred. The total of the quotas member countries have deposited with the IMF, which form the basis of Fund lending capabilities,[1] fell from 12 percent of the value of world imports in the early 1960s to around 4 percent at the end of 1981. The decline, moreover, occurred in spite of a 50 percent increase in membership quotas as of November 1980.[2]

On several occasions the IMF has supplemented its resources by borrowing. About $8.2 billion was outstanding at the end of September 1982, for example. The Fund has authority to borrow any member's currency, with the consent of the issuer. Under the General Arrangements to Borrow, completed in 1962 and extended thereafter, the IMF borrows the currencies of ten industrial-country members, although the benefits of this facility are limited to the ten. The Fund has also made borrowing arrangements with Switzerland, principal oil exporters, other nations with strong external positions, and international agencies.

Over the entire period of the Fund's existence, 75 percent of IMF credit to member nations was provided by selling them ten strong currencies[3] in exchange for their own weak currencies. As of September 1982, IMF holdings of those ten currencies totaled $24 billion. As shown in the graph, net use of IMF credit by members was $18 billion, versus only $15.6 billion at the end of 1981 and $10.8 billion at the end of 1980. The IMF, thus, has a potential stock of resources equivalent to at least 132 percent of assistance outstanding.[4] Additionally, some $16.1 billion could be borrowed by the Fund under other arrangements which have been established. Moreover, agreement appears close on plans to increase the IMF's lending abilities. One of these plans foresees increasing quotas between 30 and 50 percent. A different plan favored by the United States would create a rescue fund for countries experiencing short-term financial difficulties, within expanded facilities of the General Arrangements to Borrow. The chances that both plans will be adopted appear excellent.

A factor further supporting the conclusion that available IMF resources will be adequate to play a substantial role in helping developing countries cope with their current financial strains is also suggested in the "IMF Credit" graph. In the aftermath of the 1973-74 oil price hikes and the world recession that followed, a large proportion of IMF resources were directed toward industrial country needs. At the end of 1977, for instance, developing countries accounted for only half of IMF credit outstanding. In ensuing years, however, fiscal policies stressed in the United Kingdom and elsewhere, in combination with increased efficiencies in energy use, resulted in greater insulation of industrial economies to such shocks. An additional factor in the improved financial position of the United Kingdom, the single most important user of IMF credit in the mid-1970s, was the fuller development of North Sea oil deposits. Hence, while total IMF credit outstanding at the end of September 1982 was only 12.7 percent greater than at the end of 1977, almost the entire amount had gone to assisting developing countries.

[1] A review of Fund credit facilities and other pertinent data is detailed in each monthly issue of *International Financial Statistics*.

[2] *World Economic Outlook*, Occasional Paper 9, International Monetary Fund, Washington, D.C., April 1982.

[3] U.S. and Canadian dollars, Japanese yen, Belgian and French francs, German deutschemarks, Italian lire, Dutch guilders, U.K. pound sterling, and Saudi Arabian riyals.

[4] The IMF bases its estimates of funds available for providing credit to member countries on that of "usable currencies", or currencies that the Fund's Executive Board considers to be sufficiently strong, in light of their balance of payments and gross reserve positions, to be designated to be used for such purposes.

The Outlook for Economic Management

The third key to the financial outlook of the developing world relates to economic management. As mentioned, several developing countries — despite the easing of external problems — must reschedule their external debts and secure IMF assistance without impairing their credit worthiness among official and private lenders. Economic policies will be required that will restrain the solid economic progress experienced by many financially-troubled countries in the late 1970s and even by some in 1980 and 1981.

Developing-country economic managers and foreign lenders will doubtless be able to reach agreement on the kind of economic policies they consider appropriate. The political consequences of those policies, however, may be so strong as to suggest that the policies will not be implemented consistently. Nevertheless, the financial consequences of failing to devise policies to lower inflation and to reduce both fiscal and external strains would be traumatic. Indeed, this potential for disaster constitutes the most persuasive argument that the economic management policies leading to individual economies' adjustment to current realities will succeed.

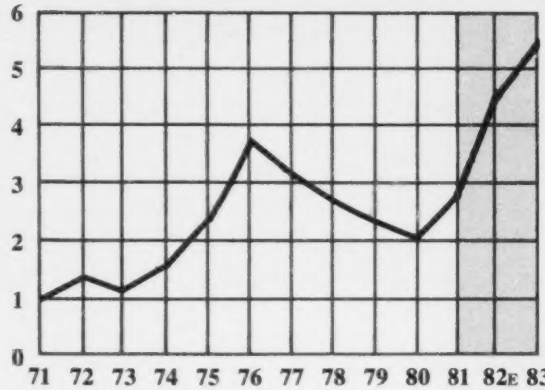
A major threat to this forecast is that the recovery of industrialized economies could falter. Another year of weak or declining exports would clearly intensify the financial strains of the developing world, in contrast to the improvement projected in this article. Furthermore, another year of declining per-capita output could affect political developments in ways prejudicing even the best-conceived economic policies aimed at bringing about adjustment.

THE LONGER-RUN OUTLOOK

The most basic economic factor bearing on the long-run financial outlook of the developing world is the fact that the group, and virtually all individual countries within it, will remain capital short. Few, if any, can be expected to enter a net debt-repayment phase of economic growth in the near future.

That capital scarcity stems from a wealth of unexploited natural resources and other economic potential and implies a high marginal return on invested capital. Increased development of these opportunities indicates an improving debt-servicing capacity for both individual borrowers and national economies. In its 1982 *World Economic Outlook*, the IMF hypothesized that over the 1984-86 period, export volume would grow

INTERNATIONAL MONETARY FUND CREDIT TO DEVELOPING COUNTRIES AS A PERCENTAGE OF IMPORTS, 1971-83



E = Estimate F = Forecast

between 5.9 and 9.2 percent for net oil-importing developing countries and between 4.0 and 6.0 percent for net oil exporters. The revival of export demand and its stimulative effect on economic growth rates will ultimately reduce the real burden of developing-country debt and insulate developing economies from the kind of shocks seen in 1982. Hence, 1982 may have been a "watershed" year for developing countries in general.

To some extent 1982 may also have been a "watershed" year for international banking. The view that foreign public-sector debt embodies a greater insulation from risk than other foreign debt, since governments generally do not cease to exist, has become somewhat tarnished. Over the next few years, however, the world economic environment should be conducive to both easier debt-servicing and a continued ability to obtain the financial resources needed for growth and diversification. Moreover, domestic economic policies in many important developing countries will be aimed at reducing structural distortions of the kind that contributed to financial crises in 1982. Hence, as developing-country borrowing for strict balance-of-payments purposes diminishes, international bank lending can be viewed from the broader perspective of financing the growth of developing countries and not just in terms of offsetting shocks. ■

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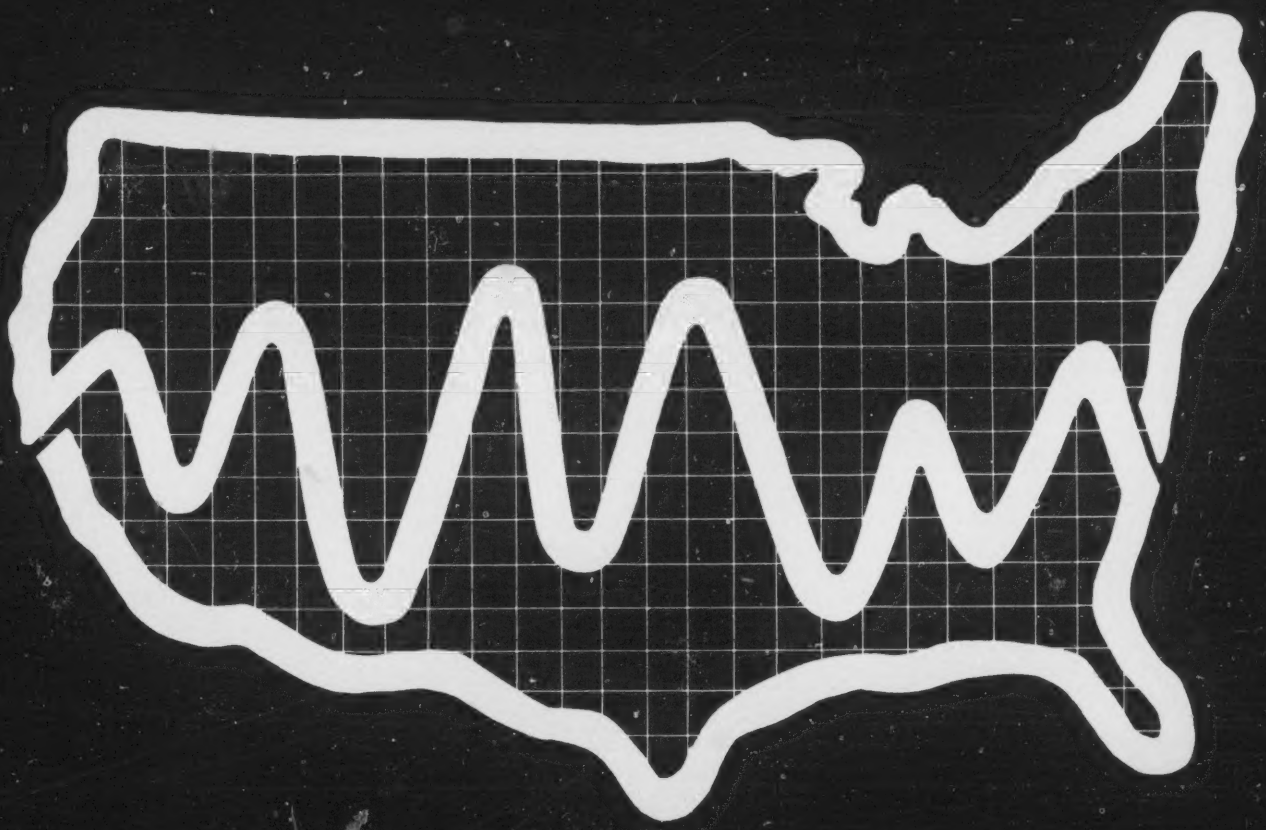

SECURITY PACIFIC NATIONAL BANK

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This report highlights the long-term outlook of the United States economy through 1988.

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SUMMARY

This report summarizes our 5-year outlook for the U.S. economy. We conclude that there are excellent prospects for relatively vigorous economic growth through the late 1980s following a period of economic recovery in 1983 and 1984. The careful conduct of economic policy, especially during the next 2 years, is seen as a key to the realization of this strong growth trend. The federal deficits are projected to remain at relatively high levels through 1988, placing continued pressure on monetary policy to hold inflationary pressures in check. The interplay of these forces indicates a relatively high level of real interest rates throughout the projection period. It should be noted at the outset that these are trend projections which incorporate no cyclicality other than the assumption that the economy will experience a moderate recovery in 1983 and 1984. We acknowledge, however, that there will continue to be a considerable degree of volatility in the economy and in financial markets, and that knowledge heightens the uncertainty of this forecast.

Real GNP is expected to grow about 3.7 percent per year from 1982 to 1988. Inflation, as measured by the GNP deflator, is expected to be a trend rate of 5.5 percent per year. As a result of the inflation and real GNP trends, total GNP in current dollars is expected to increase at a compound annual rate of about 9.4 percent from 1982 to 1988. The fastest growing components of GNP during the next 5 years, not surprisingly, are generally those that have been most depressed during the last 3 years, including spending for consumer durable goods, residential investment, and producers' durable equipment. Federal government spending for defense goods will be a leading source of stimulus during the next 5 years. Even with some curtailment of currently budgeted programs, real defense spending should grow about 5.5 percent per year. A declining share of output will be taken by consumer spending for nondurable goods and by state and local government purchases. The share of real GNP going to business fixed investment should increase significantly from its current depressed level.

The growth trend of this economy will enable a gradual reduction in unemployment from the 10.1 percent rate forecast for 1983 to 7.3 percent by 1988. The task of reducing unemployment will be made more difficult by a cyclical pickup in labor force growth during this period, although the trend rate of labor force increase will be considerably lower than during the 1970s. Additionally, the gradual aging of the population in the 1980s will move a higher proportion of workers into demographic categories that traditionally have below-average unemployment rates. Productivity growth, which should improve cyclically in the early part of the projection period, should also benefit from the gradual shift in the composition of the labor force toward older, more experienced workers.

Although relatively strong savings flows should be generated in this outlook, interest rates are unlikely to decline appreciably from the expected 1983 levels. A series of large federal budget deficits are expected to keep pressure on rates indefinitely. The prime rate, expected to average slightly under 10 percent in 1983, should remain in the 10-to-11 percent range on average, through 1988. Combined with the projected trend in inflation, this rate environment implies relatively high historic levels of real interest rates. ■

1983-1988: POLICY OVERVIEW

This projection is considered the most likely path for the U.S. economy during the next 5 years, and is basically a resilient pattern. A gradual recovery begins in early 1983 and economic growth for the 5 years from 1983 through 1988 averages 3.7 percent, which is somewhat above the long-run historical performance of the U.S. This growth trend, however, is fairly weak for a period of economic expansion. The relative weakness may be viewed as the result of lingering problems in basic industries such as autos and steel which are in the midst of fundamental re-structuring; a weak world economy that is not likely to generate renewed growth in net exports until at least 1984; continued problems in capital markets and corporate earnings related to the difficult transition from a period of rapid inflation to one of disinflation; and high levels of excess capacity in plant and equipment and unemployment which are the legacy of the last 3 years of economic stagnation.

The starting point for this study of the economic prospects for the U.S. economy between now and 1988 is the economic recovery that is now taking place. Following consecutive recessions in 1980 and 1981-1982, it now appears that the economy has begun a recovery in 1983 that has a very high probability of being sustained in view of the relatively low inflation rates and considerably improved domestic credit conditions that now prevail. As mentioned above, the economy is currently performing very far below its long-run potential growth path, and inflationary pressures are very moderate. It is very probable, however, that the current period of disinflation will be relatively short-lived and that inflation will pick up as the economy recovers in 1983 and 1984.

The big question for economic policy during the next few years is the level to which inflation and interest rates will return once the economy recovers rather completely, which will probably not occur before 1985. The main determinant of this uncertainty regarding current financial market expectations is the prospect of persistently large federal budget deficits. Despite the improved economic growth climate in this forecast, the projected fiscal year 1988 budget deficit is approximately $180 billion, or about 3.5 percent of GNP, which is close to the post-World-War-II high prior to fiscal 1983. This means that the federal government would be absorbing a very large historic percentage of total funds provided by credit markets even in 1988, after 6 years of (projected) economic expansion. In this environment, barring some dramatic breakthrough in measures to reduce the projected deficits, the risk of a shift toward a much more inflationary monetary policy will have a continuing effect on inflation and interest rate expectations.

In our view, the prospect of those continuing fiscal problems, which must be considered very real at this point, will place continued pressure on the Federal Reserve. The Federal Reserve is likely to allow rapid monetary growth in the recovery year of 1983, but should not be as accommodative in future years. This should allow the economy to recover gradually without reigniting inflation beyond the modest increase that we view as being consistent with a moderate upturn in commodity prices, wages, and other costs of business.

Given our projection that inflation will average only 5.5 percent over the period of this forecast, it is likely that investors will gradually incorporate this relatively low level of inflation into long-term rates, allowing those rates to fall somewhat from current levels. Long-term rates will, however, incorporate an inflationary premium that will keep real interest rates from declining to the lower levels that were reached in periods of expansion prior to 1980. Finally, the credit that will be supplied at a long-term rate of, say, 10.5 percent (our average forecast for Aaa corporate bonds for 1983-1988), should be sufficient to finance the credit needs of an economy that is growing at a real compound annual rate of 3.7 percent between now and 1988. The reader who doubts the feasibility of these trends is again reminded that this period begins with a very mild cyclical expansion, such that the 1979 level of real business spending for plant and equipment is not reattained until 1984, and the unemployment rate remains above 7 percent even in 1988. To some observers, this growth trend will be unacceptably weak! ■

DETERMINANTS OF LONG-TERM GROWTH

THE U.S. ECONOMIC POTENTIAL

The potential output of a nation is the volume of goods and services, as measured by real GNP, that the economy produces when its principal resources, consisting of labor and capital, are fully employed. Due to measurement problems, the extent to which the capital stock is utilized has not been observable over time, although peak periods for such approximate measures as the index of capacity utilization in manufacturing (published by the Federal Reserve Board) tend to coincide with peaks in the employment of labor resources. Hence, we tend to use the full employment of labor as a useful working definition of economic potential. Generally speaking, full employment is understood to be the lowest rate of unemployment of the labor force attainable, under the existing economic structure, consistent with the absence of inflationary pressures.

Although an unemployment rate of zero is probably possible, the maintenance of absolute full employment would conflict with other objectives of a free enterprise economic system. Historically, even at very high demand levels, some proportion of the work force is normally seeking initial jobs or between jobs, consistent with the changing skill requirements of industry and the shifting occupational and locational preferences of the labor force. For much of the nation's post-World War II history, an unemployment rate of about 4 percent was considered to be the noninflationary full employment rate. That rate, however, is not a constant but depends on the changing compositon of the labor force. Consequently, as the labor force has changed over time to include a larger proportion of groups with typically higher equilibrium rates of unemployment, the full employment rate of unemployment has also risen.

It is generally accepted that there have been three years in the postwar period when the economy operated near potential output. These years -- 1955, 1965, and 1973 — usually are referred to as full employment years. To determine the full employment rate of unemployment for this and future years, one can use the unemployment rates by age and sex observed in past full employment years as a guide to apply to the actual and/or projected labor force composition. Based upon the current composition of the labor force, the full employment jobless rate is currently estimated at 5.1 percent rather than the 4 percent rate historically thought to be full employment.

This increase is due primarily to the increased labor force participation of women of all ages and young people of both sexes which has occurred during the past 2 decades. During the next 5 years, a moderation of these trends, plus a gradual aging of the labor force, should lead to a slight reduction of the full employment rate of unemployment to 4.9 percent.

FORECAST HIGHLIGHTS
(1982-1988)

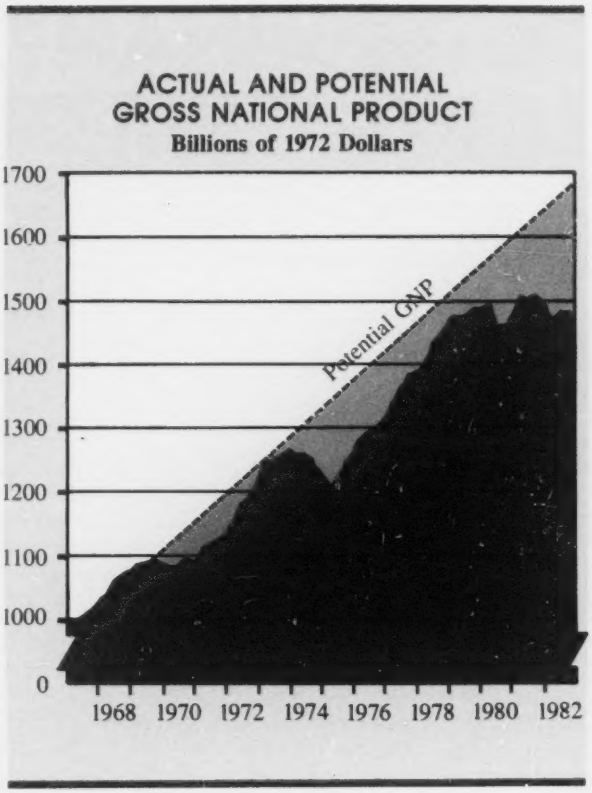
Aggregate Demand	1973	1982	1988
Potential GNP (1972 $)	1248.8	1671.3	1939.4
Real GNP (1972 $)	1254.2	1476.0	1835.5
GNP Gap (percent)	–0.4	11.7	5.4
Unemployment Rate (percent)	4.9	9.7	7.3
Nominal GNP (current $)	1326.4	3057.6	5243.0

Growth Trends	1973-82	1982-88
Real GNP	1.8	3.7
Inflation	7.8	5.5
Nominal GNP	9.7	9.4
Hours per Worker	–0.6	–0.3
Labor Force	2.3	1.7
Productivity	0.7	1.8
Compensation per Hour	9.0	7.0

The concept of the full employment gap is illustrated in the chart accompanying this text. When potential GNP is greater than actual GNP, as it has been continuously since 1973, the difference between the two curves is a measure of the gap that must be closed by growth in real output in order to attain full employment, or economic potential. For 1982, when unemployment averaged 9.7 percent, the GNP gap was 11.7 percent, which was the largest difference between potential and actual GNP in 33 years. Growth in potential GNP averaged 3.3 percent from 1973, the last full employment year, to 1982. Actual GNP growth, however, fell far short of that measure, increasing just 1.8 percent per year as the economy experienced three recessions during the 9-year period.

Potential GNP growth is projected to slow considerably during the remainder of the 1980s. From 1982 to 1988, the nation's potential output is likely to expand at a 2.5 percent compound annual rate, which is considerably less than the projected 3.7 percent annual growth in actual GNP over the same period. This projected differential between actual and potential GNP growth would result in a reduction of the GNP gap to 5.4 percent by 1988, and would lower the civilian unemployment rate to 7.3 percent. The primary reason for the lowering of potential GNP growth over the next decade is the expected slowing of labor force growth over that period. The changes in long-term population and labor force participation trends that are expected to result in a lower potential GNP growth path are discussed in the following section of this report.

A slight decline in the length of the average workweek is also projected for the 1982-1988 interval. The length of the average workweek (for nonagricultural production workers) is an important component of the potential GNP equation, since it determines, along with total employment, the total hours worked in the economy. From 1973 to 1982, the average workweek in the U.S. economy declined from 36.9 hours to 34.8 hours, a compound annual rate of decline of 0.6 percent. A smaller rate of decrease — about 0.3 percent per year — is predicted for the 1982-1988 period, resulting in an average workweek of 34.2 hours in 1988.



POPULATION

According to data based on the 1980 Census, the U.S. population is projected to reach 234.2 million in 1983 and to increase at an annual rate of 0.9 percent to 245.4 million in 1988. The generally lower birth rate since the mid-1960s has caused a drop in the population aged under 18 years in the 1980s, while the high birth rate of the baby boom era resulted in large increases in the number of persons in the 25 to 34 age category. The much anticipated increase in births that should have happened in the 1970s when the "baby boom" females reached their childbearing age did not occur. In fact, births declined from 3.6 million in 1971 to 3.1 million in 1976, a time when the proportion of the population represented by women of childbearing age (15 to 44) rose from 21.0 percent to 22.4 percent. Changes in social values and in the role of women encouraged them to postpone childbirth and have fewer children. In the 1980s, over 30 percent of the growth of households will consist of singles or unmarried couples. The increasing rate of divorce and rising median age for first marriages will delay and limit childbirth further. Birth rates will decline from 16.0 (per 1,000 population) to 15.8 in the next five years.

BEST AVAILABLE COPY

In 1900, the average life expectancy at birth was slightly over 47 years, but by 1980 it had risen to 73.6 years. With the advancement in medical technology and better nutrition, the American population will have a life expectancy of 76.0 by 1990. Immigration was high in the early 1980s due to the inflow of refugees from Vietnam, Haiti and Cuba. The Census Bureau has placed a range around its medium growth projection of 250,000 to 750,000 persons per year in its alternative projections reflecting the degree of uncertainty involved in this issue.

In 1980, approximately 47.7 percent of the national population was concentrated in the North (Northeast and North Central Regions), 33.3 percent in the South, and 19.1 percent in the West, although the minority populations had a very different regional distribution. The Southern and Western regions accounted for 90 percent of the national population growth between 1970 and 1980, and 42 percent of it was concentrated in California, Texas, and Florida. The warmer climate, abundant agricultural and mining resources together with its lead in high-tech manufacturing have kept the Pacific Southwest region (namely California, Nevada, New Mexico, Arizona and Texas) very attractive to Northern migrants and foreign investors. The recent recession in the 1980s did finally halt the rapid growth of these states, but they should still remain as the nation's fastest growing states both in terms of population and economic gains in the next five years.

Another trend in the 1970s that will continue in the next decade is the movement of the urban population to rural regions. In the decade of the 1970s, 5.9 million non-farm individuals moved from cities to the surrounding rural areas. More affordable and comfortable housing in the rural areas, among other advantages of rural life, attracted urban dwellers despite the greater remoteness of these locations. As the majority of the baby boom cohort of individuals begins to start their families, the rural non-farm population will flourish, growing by over 10 percent in this decade.

The ethnic diversity and minority proportions of the population will continue to grow. Minority groups also have relatively younger age structures as compared to the white population. Higher minority group fertility and immigration of young refugees has lowered the median age of these groups. The Asian and Pacific Islanders reported a median age of 28.6, the highest among all minorities, and that was still 2.6 years below the white median age. The Black population, which represents 11.7 percent of the total U.S. population, will grow by 11.9 percent compared to a 4.8 percent increase in the white population. The Hispanic population, which has the highest fertility rate among all minority groups, should increase its share of the total population. Other groups such as the Pacific Islanders and the American Indians also reported higher birth rates than the white population. Slightly over one-half of the Black population is found in the South, while most of the other minority groups are centered in the Western regions. Over 50 percent of the Blacks and Hispanics reside in central cities, while only 25 percent of the White population lives in the city.

EMPLOYMENT AND LABOR FORCE

The U.S. labor force has expanded steadily since 1947. In 1982, approximately 110.2 million individuals were in the country's civilian labor force. Unlike the 1970s when the labor market experienced a compound annual growth of over 2.5 percent a year, we expect the labor force to grow by an annual rate of only 1.7 percent from 1983 to 1988. Making up a hefty 30 percent of the total population, the baby boom generation, the cohort born between 1946 and 1964, brought great changes in the social and demographic structures of the nation. In the 1960s, the existing public schools and higher education institutions underwent massive expansion to accommodate this unusually large group of "baby boom" students. And as these youngsters began to join the work force, particularly after 1973, they flooded the labor market with a large supply of inexperienced workers. Stricken by a severe recession and an international oil crisis, the U.S. economy was too weak to absorb the surge of workers at that time, and unemployment soared. By the mid 1980s, when the majority of this cohort becomes primary workers and heads of household, we expect a more steady employment pattern and a rebound in productivity.

In the meantime, unfortunately, this generation of better educated workers will be confronted with an adverse employment climate. The unemployment rate mounted from 4.9 percent in 1973 to 9.7 percent in 1982. The deep recession that hit the nation between the summer of 1981 and the winter of 1982 further eroded

the nation's industrial employment capacity. In December, 1982, the civilian unemployment rate hit a post depression record of 10.8 percent, and the rate had not receded below 10.3 percent by March, 1983. The present recovery, which is considered mild by historical standards, will not substantially ease the employment outlook for the near future. Furthermore, historical data show that the employment rate has never fallen more than 2.4 percentage points within any 5-year period since World War II. So with an estimated annual real growth rate of 3.7 percent in the economy from 1982 to 1988, we anticipate that the unemployment rate will stay above 7 percent by 1988.

Teenage unemployment, which has risen substantially during the latest recession, will also remain higher. Teenage workers in the 1980s are likely to suffer a "crowding out" effect as they have to compete with a more mature but larger cohort of "baby boom" workers. Furthermore, minority teenage workers, who typically have a higher unemployment rate, will represent an increasing portion of the teenage population. With shrinking federal and state funding for job training and co-op programs, teenage workers will be in a very disadvantageous position in the labor market.

Female workers, who represent 43 percent of the civilian labor force, will assume a more significant role in the workplace. The female labor force participation rate has gone up almost uninterruptedly since 1947, and rose at a more accelerated rate for the last ten years to 52.6 percent in 1982. Unlike their predecessors, these female workers will have a longer commitment to the labor market. We see a potential increase of another 8 to 10 percent in this group's participation rate by the year 2000. On the other hand, male civilian labor force participation has declined from 86.4 percent in 1947 to 76.6 percent in 1982. Given our current unemployment benefits system and the growing pattern of multiple-income households, the male labor force participation rate would not rise beyond 79 percent within the next five years.

Civilian employment as measured by the household survey dropped by 0.9 percent to 99.5 million in 1982. The mild recovery in 1983 will bring a slight 1.0 percent increase in employment as firms tend to increase their employees' working hours in a recovery before they consider rehiring. As the economy moves to fuller capacity, employment will grow by 2.5 to 3.0 percent annually until 1988. The recent series of economic setbacks, together with intensified foreign competition, automation, and rising unit labor costs, is moving many firms to the direction of less-labor-intensive operations. Labor-saving machinery such as robots, automatic teller machines, and computer-generated speech machines, will be more heavily utilized in the next few years. Many durable goods manufacturers, challenged by growing import sales and changing consumer preferences, are updating their plants more aggressively. Although new technology will bring many openings for technically oriented jobs, a lot of conventional blue- or white-collar workers may not be able to make that career shift easily, leaving the nation with the social problem of a large pool of hard-core unemployed.

PRODUCTIVITY

The Recent Performance

In reviewing the economic history of the 1973-1982 period, the statistic which perhaps best typifies the weak performance of the U.S. economy during those years is the average productivity trend. Average productivity in the private business sector of the economy, defined as real output (GNP) per hour worked, rose only 0.7 percent per year from 1973 to 1982, and most of that meager gain took place prior to 1977. The recent data are heavily influenced by the back-to-back recessions of 1980 and 1981-1982, which contributed to very weak output growth during a period when employment, until very recently, was relatively stable. In comparison to the recent weak trend in productivity gains, the longer-run trend rate of productivity gain in the private business sector, measured over the period of 1947 to 1973, was 3.0 percent. That longer-run rate of productivity growth is probably not attainable in the near future given structural shifts in the U.S. economy between the 1940s and the 1980s.

Since the total business productivity measure is a very broad average for all industries and age-groups, it is exceedingly difficult to pinpoint with precision the separate contributions of changes in specific factors influencing productivity. Additionally, it is not always easy to attach normative significance to declines in long-run productivity, since a change in consumer preferences, for example, from manufactured goods toward services could reduce the capital-to-labor ratio and lower output per hour. It is not clear in this case

that consumers would be worse off, since it is a matter of free market preferences. It is undeniable, however, that the weak productivity growth of the last 9 years has left us worse off as a nation. Productivity gains since 1973 were insufficient to provide any gain in real earnings. Real compensation per hour, defined as average hourly compensation divided by the consumer price index, actually declined slightly from 1973 to 1982, leaving the average worker worse off at present than 9 years ago.

Causes of the Productivity Decline

Among the more prominent reasons that have been advanced in an effort to explain the productivity decline, the relatively poor investment climate during the past 9 years probably leads the list. Business fixed investment increased only 2 percent per year in real terms during the 1973-1982 interval, or less than half the rate realized from 1947 to 1973. The disruption caused by the OPEC oil embargo in 1973, the high inflation trend of recent years, and the stifling effect of high interest rates have all served to discourage capital spending, which has impaired the modernization of plants and equipment in our economy. The weak trend in capital spending was accompanied by a surge in the labor force as record numbers of new workers entered the workforce in the mid-to-late 1970s, resulting in a reduction in capital per worker, which serves to lower productivity. Since new workers are generally less productive until they are fully trained, the large influx of trainees in the 1970s contributed to relatively low marginal productivity of labor.

LONG-TERM U.S. ECONOMIC OUTLOOK
1982-1988
(billions)

	Current $		1972 $	
	1982	**1988F**	**1982**	**1988F**
Gross National Product	3057.6	5243.0	1476.0	1835.5
Personal Consumption Expenditures	1971.2	3266.6	957.0	1161.5
Durable Goods	242.5	438.6	138.7	198.0
Autos and Parts	106.0	219.3	55.6	87.3
Except Autos and Parts	136.6	219.3	83.1	110.7
Nondurable Goods	761.9	1143.3	365.0	415.9
Services	966.8	1685.0	453.3	547.6
Gross Private Domestic Investment	420.0	870.6	197.0	298.8
Fixed Investment	443.3	828.6	205.8	283.7
Nonresidential	347.6	592.3	165.5	212.9
Producers' Durable Equipment	206.2	363.9	112.4	152.4
Structures	141.4	228.4	53.1	60.5
Residential	95.7	236.3	40.2	70.8
Change in Business Inventories	–23.3	42.0	–8.8	15.1
Government Purchases	647.4	1121.4	291.2	345.4
Federal	257.7	484.6	116.2	148.3
Defense	178.6	365.5	78.6	108.4
Nondefense	79.1	119.1	37.6	39.9
State and Local	389.6	636.8	175.0	197.1
Net Exports	18.5	–15.6	30.9	29.8

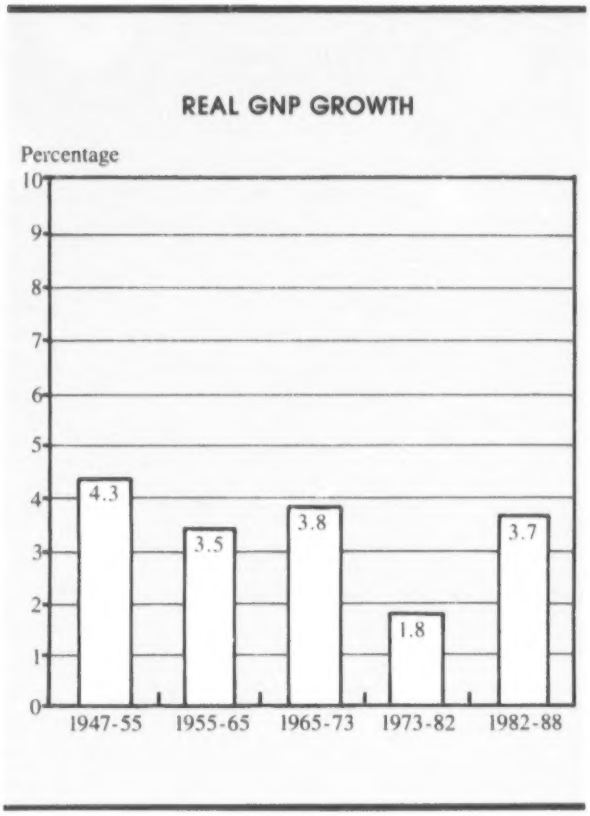
F = SPNB Forecast

Government actions can also have a pronounced impact on productivity over time, since they influence both the allocation of total production between public and private uses, and the way in which the private sector conducts business. It appears that the actions of government exerted a mainly negative effect on productivity from 1973 to 1982. Environmental legislation during this period compounded the problem by causing an increased share of capital spending to be devoted to "nonproductive" uses such as pollution control equipment. The federal government was deemphasizing basic research and development expenditures during the 1970s, as transfer payments accounted for an increased share of the budget. The effect of progressive income taxes in an inflationary environment operated to stimulate borrowing for housing and consumption and to hamper savings and business investment.

Finally, the structure of the entire economy was changing in a direction that tended to reduce productivity, as a higher share of resources went into the highly labor intensive trade and service sectors that are characterized by relatively low rates of average productivity growth. In summary, although the separate contribution of each of the factors cited above has proven difficult to identify, collectively they are thought to account for most of the decline in productivity growth since 1973.

The Long-Run Outlook for Productivity

The outlook for productivity growth in the 1980s is considerably improved from the experience of the recent past. Since part of the recent weakness in productivity growth is due to the occurrence of two recessions since 1980, offsetting cyclical gains are expected in 1983 and 1984, when productivity growth should average over 2 percent per year. However, prospects for an improvement in the trend rate of productivity growth also appear to be improved between now and 1988. Average business productivity growth is projected to increase 1.8 percent per year from 1982 to 1988. This improvement is due, in addition to the cyclical output gains in 1983 and 1984, to the continued maturation of the labor force and the relatively strong outlook for business fixed investment between 1982 and 1988.



THE OUTLOOK FOR REAL GROWTH

The relatively strong growth trend incorporated in our economic projections to 1988 is based on the assumption that the weak growth trend of 1973 to 1982 was an exception to the longer-run trend, rather than a basis for weaker expectations for the next five years. Since those expectations tend to be based heavily on recent experience, it is easy to lose sight of the fact that the low growth, high inflation, and high interest rates that prevailed until very recently constitute a very exceptional period in our economic history. During the late 1970s and before, the monetization of large federal government budget deficits enabled continued strong consumer spending for commodities at increasing prices and frequently on credit terms that could be viewed as very burdensome in a historical perspective. At the same time, the increased federal government presence in financial markets led to a reduced share for private-sector financing in the credit markets, and thus eroded the economy's ability to renew its capital stock.

In our view, the inflationary excesses of the late 1970s have now been largely corrected, although not without some very high costs in terms of unemployment and large federal government deficits. Although the lingering effects of the policies designed to deal with high inflation will probably be with us for some time to come, we have emerged from the recession of 1981-1982 with very low inflation and a relatively modest private sector debt burden which gives us the potential to grow fairly rapidly for several years without much risk of reigniting either cost or demand pressures. The key variable in the outlook for the next five years is the ability to control and redirect federal spending sufficiently to reduce the burden of the deficit as a percentage of GNP. Based on our projection that the government's claim on resources will be reduced as a percentage of total output between now and 1988, the private sector should be able to expand at a relatively high growth rate.

The combined growth of the labor force, productivity, and hours worked per employee determine how rapidly the economy can grow over time. This is another way of looking at the concept of potential output discussed earlier in this report. Potential GNP is expected to grow at a compound annual rate of 2.5 percent from 1982 to 1988, compared with a 3.3 percent growth rate from 1973 to 1982. The slowdown in the growth of potential GNP in the 1980s is due to the more moderate expansion of labor force, since productivity is expected to grow faster than during the 1970s.

Actual GNP is projected to grow by about 3.7 percent per year, somewhat faster than the growth in economic potential between 1982 and 1988. It becomes possible for the economy's actual growth rate to outdistance the growth of potential because at the starting point for this comparison, in 1982, the economy was operating about 12 percent, or more than $195 billion in 1972 dollars, below its potential growth path.

GNP GROWTH AND SECTORAL SHARES

	1982-1988 Growth Trend		Share of GNP (Current $)		Share of GNP (1972 $)	
	(Current $)	(1972 $)	1982	1988F	1982	1988F
Gross National Product	9.4	3.7	100.0	100.0	100.0	100.0
Personal Consumption Expenditures	8.8	3.3	64.5	62.3	64.8	63.3
Durable Goods	10.4	6.1	7.9	8.4	9.4	10.8
Autos and Parts	12.9	7.8	3.5	4.2	3.8	4.8
Except Autos and Parts	8.2	4.9	4.5	4.2	5.6	6.0
Nondurable Goods	7.0	2.2	24.9	21.8	24.7	22.7
Services	9.7	3.2	31.6	32.1	30.7	29.8
Gross Private Domestic Investment	12.9	7.2	13.7	16.6	13.3	16.3
Fixed Investment	11.0	5.5	14.5	15.8	13.9	15.5
Nonresidential	9.3	4.3	11.4	11.3	11.2	11.6
Producers' Durable Equipment	9.9	5.2	6.7	6.9	7.6	8.3
Structures	8.3	2.2	4.6	4.4	3.6	3.3
Residential	16.3	9.9	3.1	4.5	2.7	3.9
Change in Business Inventories	—	—	–0.8	0.8	–0.6	0.8
Government Purchases	9.6	2.9	21.2	21.4	19.7	18.8
Federal	11.1	4.1	8.4	9.2	7.9	8.1
Defense	12.7	5.5	5.8	7.0	5.3	5.9
Nondefense	7.1	1.0	2.6	2.3	2.5	2.2
State and Local	8.5	2.0	12.7	12.1	11.9	10.7
Net Exports	—	–0.6	0.6	–0.3	2.1	1.6

F = SPNB Forecast

As a result of the inflation and real growth trends, current dollar GNP is expected to increase at a compound annual rate of 9.4 percent from 1982 to 1988. Total GNP in current dollars should reach more than $5.2 trillion based on these trend rates of growth. The fastest growing components of real GNP, not surprisingly, are generally those that have been somewhat depressed during the last two years, such as consumer durable goods, especially autos and parts; residential investment; and producers' durable equipment. In the public sector of the economy, federal government purchases of defense goods are expected to increase 5.5 percent per year in real terms. A declining share of output will be taken by consumer spending for nondurable goods and services, and by state and local government expenditures. The overall share of consumption spending in real GNP is likely to be about 1.5 percent less in 1988 than it was in 1982. The share of real GNP going to business fixed investment should increase significantly from the depressed base of 1982. The government's share of output is expected to fall from 19.7 percent in 1982 to 18.9 percent in 1988, reflecting the declines in federal nondefense spending and state and local government spending. ■

THE UNITED STATES ECONOMY THROUGH 1988

THE FINANCIAL ENVIRONMENT

The financial landscape of the next five years will be shaped and colored by evolving fiscal policy, by the degree of monetary restraint imposed upon the economy, and by the level of inflation. Important changes have occurred over the past year with regard to two of these critical forces: the inflation outlook and the policy stance of the Federal Reserve.

Though the current lower level of inflation is being importantly affected by the still-weak economy and declining oil prices, a good case can now be made that inflation will stay in the low single-digits for many months to come. Furthermore, inflation is expected to stay in the mid-single-digits throughout the next five years.

With regard to monetary policy, the more pragmatic stance taken by the Federal Reserve since mid-1982, coupled with the precarious nature of the economic recovery, virtually guarantees no substantive tightening of policy any time soon. Moreover, the experiment with strict monetary targeting appears to have been put aside on a more permanent basis. Debates regarding the appropriate definition of "money," the effects of financial deregulation on the aggregates and the mysterious behavior of velocity since 1982 will forestall any early return to strict monetary targeting. Rather, monetary policy will be based on overall economic growth and the level of inflation.

The third important link determining financial market developments is fiscal policy, about which much remains undone. Despite emerging economic recovery, it appears that the Treasury's annual credit needs will remain well above $100 billion for years to come. Belief in this outcome plus concern that monetary policy will hold the line on credit growth have kept interest rates inordinately high relative to inflation. The underlying rationale is, of course, that business credit needs will pick up substantially as recovery continues — competing with Treasury needs and putting upward pressure on rates.

Business credit needs in the type of economic environment foreseen, however, will not be as large as feared. It is true that a great deal of debt restructuring is required. Businesses must issue large quantities of long-term debt, but a substantial sum will be used to substitute for short-term debt in order to return to a better balance of short-term vs. long-term debt usage. More important still, capital spending is not expected to be robust over the next five years — and certainly not in the early years. Thus, a modest pace of capital spending, in conjunction with strong internal funds generation due to healthy profits growth, imply only a moderate pace of business credit needs in the next few years.

In terms of total demands on credit markets, it appears clear that the Federal government will be taking a larger share in the coming five years than previously. The increased government share will come importantly from housing and consumer credit as lower inflation and fairly high real interest rates foster increased accumulation of financial assets as opposed to tangible assets.

INTEREST RATE OUTLOOK
1983-1988

	5-Year Average 1978-82	1982	SPNB Forecast 1983-88 Average
Short-Term:			
Prime Rate	14.15	14.86	11.00
Commercial Paper — 90-Day Dealer	11.76	11.89	9.00
Treasury Bills — 3 month	10.67	10.62	8.00
Federal Funds	12.22	12.26	9.25
Longer-Term:			
Aaa Corporates	11.63	13.68	10.50
New Aa Utilities	12.73	15.06	11.25
Mortgage, Conventional —Commitment	13.65	16.59	12.50

As shown in the interest rate chart, both long-term and short-term rates are expected to average well below their levels during the last five years though fairly close to current levels. Inflation is a critical factor in this forecast. Given our assumption that inflation will average only 5.5 percent over the period, investors will slowly incorporate this lower level into long-term rates, allowing the inflation premium in rates to fall. The single most important factor keeping long-term rates as high as forecast is the uncertainty surrounding the potential inflationary implications of persistently large federal budget deficits.

GOVERNMENT SPENDING

By 1988, the federal government will account for a smaller share of Gross National Product than in 1982, reversing the trend of recent years. Nevertheless, federal outlays and the deficit will represent a greater share of GNP than in 1973. The federal deficit is expected to remain at historically high levels relative to GNP throughout the period. The unified budget deficit for FY 1983, estimated at some $190 billion, will represent approximately 6 percent of GNP. Since 1947, the largest proportion prior to this year was 4 percent, recorded in FY 1976. Federal receipts are projected to grow more rapidly than outlays throughout the period, closing the deficit to some $180 billion. At this level, the deficit would still represent approximately 3.5 percent of GNP.

A substantial portion of the current year's deficit is directly attributable to the length and severity of the current recession. If the economy were operating at a 6 percent unemployment rate, the current year's deficit would be reduced to approximately $75 billion. Most of the remaining deficit is the result of the tax measures enacted over the past two years. The projected economic recovery and expansion will not eliminate, or even substantially reduce, the federal deficit. In addition to the 10 percent personal income tax rate reduction, scheduled for July 1, 1983, the individual income tax brackets, the zero bracket amount, and the personal exemption will be adjusted annually for inflation beginning with calendar year 1985. The adjustment for a given calendar year will be based upon the percentage increase in the Consumer Price Index in the fiscal year

FEDERAL BUDGET OUTLOOK
NATIONAL INCOME ACCOUNTS (NIA) BASIS

				Growth Trend	
Current $ Billions	**1973A**	**1982A**	**1988F**	**1973-82**	**1982-88**
Receipts	$258.7	$614.2	$1,010.0	10.1%	8.6%
Outlays	264.3	763.4	1,190.0	12.5%	7.7%
Purchases of Goods and Services	102.0	257.9	484.6	10.9%	11.1%
Defense	72.8	178.6	365.5	10.5%	12.7%
Nondefense	29.1	79.1	119.1	11.8%	7.1%
Deficit	5.6	149.3	180.0	—	—
As Percentage of GNP					
Receipts	19.5%	20.1%	19.3%	—	—
Outlays	19.9%	25.0%	22.7%	—	—
Purchases of Goods and Services	7.7%	8.4%	9.2%	—	—
Defense	5.5%	5.8%	7.0%	—	—
Nondefense	2.2%	2.6%	2.3%	—	—
Deficit	0.4%	4.9%	3.4%	—	—

ending prior to a given calendar year. For example, the adjustment for 1985, will be based on the increase in the CPI between fiscal years 1983 and 1984. The effect of these tax measures will only partially be offset by scheduled increases in Social Security contributions and various excise taxes. Thus, while economic recovery will bring about more rapid growth in federal receipts, the increase will be less than past experience. While total federal outlays will continue to be affected by general price increases, individual income tax payments, which in 1982 represented some 48 percent of total federal receipts (National Income Accounts basis), will only increase as real income increases.

From 1982 through 1988, federal outlays (NIA basis) are projected to grow at a compound annual rate of 7.7 percent. As a share of GNP, federal outlays would fall from 25 percent in 1982, to 22.7 percent in 1988. By comparison, federal outlays represented 19.9 percent of GNP in 1973. The nondefense purchases are expected to grow at a compound annual rate of 7.1 percent between 1982 and 1988. This growth largely represents projected increases in employee compensation, which currently represents some 40 percent of total nondefense purchases. In real terms, this growth would represent an annual rate of 1 percent.

The most rapidly growing outlay category will be defense purchases, projected to grow at an annual rate of 12.7 percent. Over the period, defense-related budget authority is forecast to increase annually by some 5.5 percent in real terms. In addition to spending authorization for maintenance and operations, which generally results in budget outlays during the same year, a sizeable portion of projected budget authority represents authority for modernization. Because of the longer lead-time associated with military procurement, associated budget outlays are not recorded until later years. For example, for FY 1984, the Administration requested budget authority for weapons systems procurement of $94.1 billion. If none of this authority were approved, total projected defense outlays would decline by less than $13 billion, or 6 percent. By 1988, even with more modest defense-related assumptions than the Administration has requested, the increase in budget outlays for defense will accelerate as weapons systems, authorized in the current year and in recent years, are delivered. Furthermore, outlays for maintenance and operations, including employee compensation, will continue to increase with prices and with some increase in the level of current readiness and force size.

With the projected increase, defense purchases would represent approximately 31 percent of total federal outlays, compared with less than 25 percent in each year since 1974. As an indication that defense outlays are not at historically high levels as a portion of federal spending, defense outlays exceeded 31 percent of total outlays in every peacetime year from 1951 through 1971. Relative to GNP, defense-related purchases would rise from some 6 percent in 1982, to 7 percent in 1988. By comparison, this ratio was 8 percent throughout the 1960s and almost 10 percent during the second half of the 1950s.

Purchases of goods and services by state and local governments are expected to increase at an annual rate of 8.5 percent between 1982 and 1988, or 2.0 percent in real terms. The largest share of state and local purchases will continue to be related to education, with the remaining purchases largely attributable to medical services, income support programs, and transportation. Increased purchases for the latter category in part result from the federal Highway Revenue Act of 1982, which increased the federal excise tax on gasoline and diesel fuel from 4 to 9 cents per gallon effective April 1, 1983 through September 30, 1988. The proceeds of this tax increase, estimated to be approximately $5 billion annually, will be reimbursed to state and local governments for transportation projects.

THE OUTLOOK FOR INFLATION

One of the most important economic developments of 1982 and 1983 has been the significant improvement in the nation's rate of inflation. The growth path of inflation has not only slowed dramatically, but has also decelerated at a much faster rate than anticipated by economists using conventional forecasting models.

It is worthwhile to examine recent movements in the major price indexes to assess the significance of the changes which have occurred. The Consumer Price Index, which rose 13.5 percent in 1980, and 10.3 percent in 1981, advanced 6.2 percent in 1982. The Producer Price Index gained just 4.0 percent in 1982, after increasing a substantial 14.1 percent in 1980 and 9.7 percent in 1981. Moreover, the GNP deflator, which is generally considered to be the broadest, most accurate price index, recorded a similar performance. The deflator increased a relatively modest 5.9 percent in 1982, after rising 9.0 percent in 1980 and 9.4 percent in 1981.

The trend of lower inflation rates has continued into 1983 as well. The Producer Price Index fell 1.0 percent in January, the largest drop in the index since it was first calculated in 1947. Although this decline primarily reflects weak energy prices, it should be noted that other major components of the index also contributed to the price drop, including food prices, capital equipment prices, and prices for consumer goods other than food and energy. The Consumer Price Index was virtually unchanged over the first part of the year, recording a 0.2 percent increase in January, and a 0.2 percent decrease in February.

A good deal of historical evidence suggests that the equilibrium rate of inflation is principally a function of the long-run growth path of the money stock. This hypothesis has been supported in studies of "hyper-inflations", such as those which occurred in post-World War I Germany and Hungary, as well as in analyses of moderate inflations, such as the experience of the United States during the late 1960s and early 1970s, and the French experience of the 1920s. An examination of our current monetary data seems to provide additional evidence that changes in the growth rate of the money stock are a key determinant of the steady state rate of inflation. The money supply, which we may define as principally currency plus checkable deposits, grew at approximately a 7.5 percent annual rate during the 1978-1980 period. However, the growth path of money slowed considerably during 1981, averaging just 5.0 percent over the year. Moreover, the velocity of money, which is also a fundamental determinant of prices and income, fell substantially during 1982.

This represents the first decline in this component since 1954, and only the second in the post-war period. Thus, it would appear that the significant changes which occurred in money growth and velocity seem to be quite capable of explaining the rapid, significant decline in the rate of inflation. This would further indicate that the "monetarist" hypothesis is not in conflict with the most recent data.

Although the importance of monetary phenomenon as causal factors of changes in the inflation rate cannot be overlooked, it should also be noted that exogenous supply "shocks" or innovations, and the sharply higher (or lower) relative prices they lead to, can also have a significant impact on the price level. Substantial changes in sectoral prices not only can have important, though relatively transitory, effects on inflation, but can also hamper the monetary authority in conducting policy which is consistent with price stability.

Recent studies have shown that the severity of our most recent experience with inflation can be partially traced to the significant price shocks which occurred in the energy and food sectors during the late 1970s and early 1980s. Petroleum prices rose from approximately $12.00 per barrel in 1979 to $34.00 per barrel in 1981. This episode of sharply higher curve prices was partially a result of reduced oil supplies from the Middle East, reflecting political and military events in Iran and Iraq. Food prices also advanced rapidly during this period, as a result of both poor harvests and federal agricultural policy that was designed to support certain agricultural prices.

Since both of these goods tend to be price inelastic and also represent a significant portion of aggregate consumer expenditures, it is no wonder that the major price indexes recorded dramatic increases over the period in question. Moreover, supply shocks of this nature can also have rather substantial, adverse effects on real economic activity. Given this possibility, it is interesting to note that the period in which the price shocks occurred was also characterized by relatively accommodative monetary policy. This would suggest that the Federal Reserve was perhaps willing to risk higher inflation in hopes that faster money growth could offset the negative output effects of the oil and food price increases. Thus, the resource price shocks not only created transitory surges in the price level, but also thwarted the monetary authority in pursuing its objective.

However, the same factors which exacerbated inflation just two years ago have also led to a general deceleration in the current inflation rate. Since 1981, the marker price of oil has declined from $34.00 per barrel to $29.00 per barrel, a drop of approximately 15.0 percent. This decrease has occurred despite massive production cutbacks in many of the OPEC member countries. Similarly, the global recession, combined with record harvest, has helped moderate food price increases. After rising 7.8 percent in 1981, the food and beverage component of the Consumer Price Index rose by only 4.1 percent in 1982.

There are several other components which also contributed to the slowdown in inflation. The dollar showed remarkable strength over the last two years, rising by 47.0 percent against an average of foreign currencies. Exchange rates can affect prices in the U.S. by reducing the rate of increase in the dollar price of imports. Moreover, as imported goods become cheaper relative to domestic goods, market forces may cause domestic sellers to slow their own price increases to remain competitive.

A significant, feedback relationship exists between housing prices and inflation. Lower housing costs can help reduce the growth rate of inflation directly via their impact on the price index, while lower inflation may change individuals' expectations of future inflation rates, thereby reducing the quantity demanded of housing. The housing market was also perceptibly depressed by the existence of historically high real interest rates, which perhaps reflect uncertainty about future economic activity as well as concerns over expected, relatively large budget deficits.

From the foregoing analysis, it is reasonable to conclude that the growth path of inflation will be principally determined by monetary factors and substantial changes in important relative prices. Although long term unconditional forecasts of these variables may be subject to fairly significant error, some evidence now suggests that inflation, while perhaps not staying as low as the current rate, will be somewhat more moderate than its performance in the 1970s. Security Pacific Bank estimates that inflation, as measured by the GNP deflator, will grow at a relatively moderate rate of 5.5 percent through 1988.

INFLATION OUTLOOK
GNP COMPONENT DEFLATORS
1982-1988

	1973-82	1982-88
Gross National Product	7.8	5.5
Personal Consumption Expenditures	7.7	5.3
Durable Goods	6.2	4.0
Autos and Parts	7.3	4.7
Except Autos and Parts	5.4	3.2
Nondurable Goods	7.5	4.7
Services	8.2	6.3
Gross Private Domestic Investment	—	—
Fixed Investment	8.3	5.2
Nonresidential	8.1	4.8
Producers' Durable Equip.	6.8	4.5
Structures	10.6	6.0
Residential	9.1	5.8
Government Purchases	8.5	6.5
Federal	8.5	6.7
Defense	8.8	6.8
Nondefense	8.0	6.0
State and Local	8.5	6.4
Exports	8.6	6.0
Imports	10.4	6.5

Sectoral price increases should not vary significantly from the average, although the cost of government purchases is expected to rise somewhat faster than consumer goods prices.

Given the abundant harvests and surpluses of agricultural goods over the last two years, and assuming continued large yields over 1983, it is reasonable to assume that food prices will increase at a significantly lower rate over the forecast period than during the 1970s. Although the government's "payment-in-kind" program should help push farm prices higher, there is little available evidence suggesting that food price increases will parallel those of three years ago.

The trend of lower increases in labor costs will also continue over the next two years. In the twelve months ended in January, the hourly earnings index rose only 5.4 percent, compared to an 8.3 percent increase in the previous year. Collective bargaining settlements negotiated in 1982 yielded the smallest wage increases since 1968. Moreover, it appears that wages and prices have become somewhat more flexible than in the past. As an example, U.S. steel workers recently ratified a 41-month labor contract with seven major companies. The concessions include an immediate 9.0 percent wage reduction, as well as a one-year elimination of cost-of-living adjustments. This type of behavior not only has beneficial effects for inflation, but also helps bring down the costs of achieving lower inflation rates.

A return to stable oil prices should also help moderate inflation over the forecast period. The most recent evidence tends to suggest that the behavior of oil prices over the rest of the decade may be quite different from that of the 1970s. Following substantial price cuts by Nigeria and the North Sea producers earlier this year, the members of OPEC reached an agreement which effectively lowers prices by about 15.0 percent. The agreement also establishes production quotas for the individual producers, with Saudi Arabia keying their production to maintain prices in light of market conditions. As the economy recovers over the rest of 1983 and 1984, world oil demand should increase moderately and could conceivably produce an environment which would result in higher crude oil prices. However, excess capacity in the producing countries, combined with a relatively energy-efficient capital stock in the consuming countries, should temper price increases over the forecast period.

Declining oil prices have had the additional benefit of restoring competition between natural gas and residual fuel oil. The end result has been that the rate of increase of natural gas prices has slowed dramatically. After rising 20.7 percent from December 1981 to December 1982, wholesale natural gas prices declined 2.7 percent in January. Over the next several months, residential gas price increases should return to single-digit annual rates.

Higher productivity growth (which is discussed at greater length in another section of this report) will be a positive force for inflation as well as for real economic activity. The expected increase reflects, among other things, the "baby boom" cohort entering a more productive stage in its career cycle and continued technological advancements in the capital stock.

Assuming that the Federal Reserve will be able to maintain reasonable, steady growth of the money supply in light of expected record budget deficits and that there will be no exogenous, sectoral price shocks, the U.S. economy should experience a moderate expansion with moderate inflation over the forecast interval.

CONSUMER SPENDING

Consumer spending is expected to account for a somewhat smaller proportion of real GNP in 1988 than in 1982. In part, that development reflects the likelihood that expenditures on housing will make a greater claim on household budgets in 1988 than in the very depressed housing year of 1982, when total residential housing starts reached a level of 1.06 million, the lowest total since World War II. The major growth category of consumer spending is likely to be durable goods, for which a considerable backlog of demand now exists for purchases that have been postponed during the last several years. Real consumer spending for durable goods in the fourth quarter of 1982 was 4.8 percent below its level at the end of 1978, 4 years earlier. The release of this postponed durable goods spending during the first 2 years of recovery should have a pronounced effect on the trend rate of growth of total consumer spending during the next 5 years, although purchases of nondurable goods and services are expected to grow at more moderate rates.

The question for automobile sales in the next 5 years is more one of magnitude than direction. The auto stock in this nation is now estimated to be more than 7 years old, on average, which would ordinarily mandate replacement purchases in the near future for a very large number of cars. In terms of the demographic trends expected in the next few years, and the traditional preferences of Americans for personal transportation, we could be on the verge of several consecutive 11-to-12 million unit years. There is some reason to expect, however, that once the current backlog of demand for autos has been eliminated, the equilibrium stock of autos will be lower in relation to population, incomes, and other variables than during the last decade or so. The recent experience, in which sales of domestic autos have remained very stable during the first 3 months of 1983 in the face of some very sharp reductions in financing terms, may be partial confirmation of a shift in preference away from autos to other goods.

In the opinion of some auto industry observers, there appears to have been a downward shift in long-term demand for autos that has occurred in response to higher operating costs, perceived high prices, disappointment over product quality and performance, and, even more intangible, the possible end of the traditional American love affair with the family car(s). Although these "taste" factors are difficult to identify, the net effect of the shift in demand for autos could be to lower the equilibrium demand for autos during a reasonably good year in the 1980s to perhaps 10.5 million units, compared with a good year of 11 million units during the 1970s. Considering that population will have increased more than 10 percent from 1978, the last year when 11 million cars were sold, to 1988, when we are also projecting a demand for 11 million units, this represents a major shift in demand. Thus, real consumer spending for durable goods is expected to increase much faster than real GNP over the next 5 years, but much of that growth will represent a catch-up.

Consumer spending on nondurable goods is projected to increase at a relatively modest real annual rate of 2.2 percent from 1982 to 1988; the trend growth rate, however, conceals some very diverse behavior by product category. Food is the largest category of nondurable goods, and accounts for just over half of the total spending for nondurables. Purchases of food for home consumption dominate this category, since restaurant expenditures are considered services. The well-established declining trend in the proportion of food purchased for home consumption is projected to continue through 1988, resulting in a relatively modest growth rate of 1.5 percent for this category. Purchases of clothing and shoes, which currently account for

about 23 percent of nondurables, are expected to lead this sector in growth at an annual rate of about 3.3 percent. Purchases of gasoline and oil, which are a smaller category of nondurable goods, have declined in recent years in response to the sharp price increases of the 1970s. Although motor fuel prices have dropped recently, that decline is partly due to world recession and is likely to be reversed during the recovery period, resulting in a continued modest decline of 0.4 percent per year in purchases of gasoline and oil.

The services portion of consumer purchases is expected to show the strongest gain of any major sector — a compound annual real growth rate of 3.2 percent per year — between 1982 and 1988. The growth of this sector should be led by transportation services, which are projected to gain 3.5 percent per year, paralleling somewhat the strong expansion in spending for automobiles and parts during the next few years. Housing services should also show strong gains, with a projected 3.2 percent real annual growth trend between 1982 and 1988. The household operation category of consumer services, which includes a large component of utility costs, is slated to increase about 2.1 percent per year during the 1982-1988 interval, showing in part the negative effect of an expected decline in real consumer purchases of natural gas. A catch-all category of "other" services, which includes medical, legal, entertainment and many lesser categories, should increase about 3.2 percent per year from 1982 to 1988.

THE OUTLOOK FOR BUSINESS INVESTMENT

Business capital spending has been a major casualty of the 1981-82 recession. Real fixed investment, which advanced at a 6.3 percent annual rate in the first quarter of 1981, has since declined progressively. The most recent data indicate that real fixed investment fell 5.0 percent in 1982 after increasing 3.5 percent in 1981.

Moreover, the current decline in capital spending should not be solely viewed as a result of the present business cycle. The growth rate of business fixed investment in the United States has fallen substantially since the 1960s. An examination of the data shows that the share of real output devoted to nonresidential fixed investment has declined by more than 30.0 percent between the late 1960s and the 1970s. Furthermore, the growth rate of the nonresidential capital stock fell even more precipitously, decreasing approximately 40.0 percent during the same period.

Recent studies suggest that the general decline in capital accumulation in the United States can be partially explained by the significant increase in the rate of inflation and its interaction with U.S. tax laws. These factors distort the net real rate of return on business investment, and as a result, reduce the attractiveness of nonresidential business spending relative to other forms of investment.

The interactive effects of inflation and the existing tax structure distort the relative return to business capital in two principal ways. First, an increase in the steady state rate of inflation lowers the real value of depreciation costs. This is an especially significant problem for capital intensive industries, particularly during periods of unanticipated inflation. Secondly, common stock shareholders pay capital gains tax on nominal increases in the value of their stock. Thus, individuals can pay taxes for price appreciation even though the real value of their investment may have declined. It is true that inflation provides an incentive for firms to engage in debt-financing because nominal interest payments can be deducted and can effectively reduce firms' taxable income. However, this effect is somewhat offset because bondholders pay taxes on nominal, inflated interest income. Thus, it is reasonable to conclude that the net effect of higher inflation and the tax code has been to depress real investment significantly.

The present decline in capital spending also reflects the severity of the latest recession. Deterioration in business fixed investment is largely a result of weak demand for manufactured goods, excess industrial capacity, high real interest rates, and the poor health of corporate balance sheets.

Unemployment, which rose to a post-World War II record of 10.8 percent in December, combined with relatively weak gains in personal income and a high degree of economic uncertainty, resulted in real final sales declining significantly in 1982. Weakness was especially evident in the highly visible consumer durable sector, particularly in sales of autos.

Weak final demand has had two important effects on capital spending. First, real manufacturing output has decreased substantially. Over the period July 1981 to November 1982, the Index of Industrial production fell 12.0 percent. The capacity utilization rate for manufacturers recorded a similar decline, falling to

67.3 percent. This evidence suggests that the net demand for fixed investment has declined because businesses can expand output quite substantially with their current capital stock. Secondly, as new information about specific product demand, prices, and aggregate economic activity becomes available to firms, expectations about future output and capital requirements can change, often quite significantly. Given the severity of the most recent downturn, it may be reasonable to assume that the present weakness in business spending partially reflects pessimistic expectations.

High real interest rates have also had a substantial impact on capital spending. Historically high rates have had a "price" effect on investment by significantly raising the cost of capital expansion. The combined effect of high lending rates with increased economic uncertainty has created an environment which encourages firms to conserve cash and purchase high-yielding securities, rather than commit funds to long-term capital projects. High interest rates have also had a damaging effect on corporate balance sheets. Since the fourth quarter of 1979, persistently high long- and short-term rates have resulted in debt service requirements rising to record levels. The rising burden of corporate debt consumes a significant amount of firms' resources, and effectively limits businesses' ability to expand.

Given these negative factors, it is reasonable to expect that nonresidential fixed investment will demonstrate significant weakness through 1983. However, expected lower inflation rates, a moderate economic expansion, and the long term benefits of the recent change in tax legislation should provide sufficient stimulus for a recovery in capital spending over the forecast period. Security Pacific Bank forecasts that real fixed investment will grow at a 5.5 percent annual rate through 1988.

Nonresidential investment is expected to advance 4.3 percent annually, reflecting a 5.2 percent growth rate in producers' durable equipment, and a 2.2 percent growth rate in structures investment. Improving corporate profits and balance sheets, combined with rapid technological advances, should result in manufacturers increasing real equipment investment significantly. However, spending on nonresidential structures increases very slowly, reflecting the surplus of office space in major urban areas.

Residential investment should be quite robust over the forecast period, advancing at a 9.9 percent growth rate. This forecast reflects the general improvement which has occurred in the housing sector over the last few months, as well as favorable demographic trends and better conditions in the financial markets. A substantial percentage of the baby boom cohort does not yet own a home, but as the relative income of this group increases over the forecast period, it is likely that its demand for housing should also increase substantially. Moreover, expected declines in mortgage rates should also support strong housing growth.

Even though fixed investment may remain quite weak over the short run, there is some evidence available which suggests that the decline in capital investment is ending. Automobile sales, which often lead the recovery in equipment spending, have improved modestly. Although sales have not generally improved over the first quarter, manufacturers have extended subsidized lending agreements and, in some cases, have lowered the effective interest rate. This would suggest that sales should improve over the balance of the year, particularly as the recovery advances and economic uncertainty is reduced.

New orders for manufactured goods have also improved substantially. Nondefense durable goods orders advanced a dramatic 10.5 percent in January, reflecting a 40.0 percent increase in steel orders, a 20.0 percent increase in orders for motor vehicles and parts, and a 12.0 percent increase in nonferrous metal orders. Since investment spending often lags changes in new orders by six months to one year, capital spending will probably record significant improvements later in the year.

Lower oil prices should also have a beneficial impact on capital spending. Although the full effect of lower crude prices will tend to be distributed over time, it should provide a significant positive contribution to fixed investment over the forecast interval.

Recent evidence also suggests that the fundamentals of investment are improving. Capacity utilization and industrial production both rose significantly over the first quarter. The corporate ratio of assets to liabilities improved during the last half of 1982 and should continue to do so in 1983. Similarly, internal cash flow

CORPORATE PROFITS OUTLOOK
1982-1988

	Current $ Billions			Growth Trend	
	1973A	1982A	1988F	1973-82	1982-88
Operating Profits (w/ IVA & CCADJ)	$108.3	$160.8	$419.8	4.5%	17.3%
Nonfinancial Corporations	78.6	118.7	355.6	4.7%	20.1%
Inventory Valuation Adjustment	–20.0	–9.2	–40.0	—	—
Capital Consumption Adjustment	2.7	–4.9	19.0	—	—
Corporate Profits Before Taxes	125.6	174.9	440.8	3.7%	16.7%
Corporate Profits After Taxes	76.5	117.1	299.0	4.8%	16.9%
Dividends	27.0	70.3	112.0	11.2%	8.1%
Retained Earnings	49.5	46.8	187.0	–0.6%	26.0%
Depreciation (Book)	73.7	220.2	422.6	12.9%	11.5%
Internal Cash Flow (Retained earnings plus depreciation)	123.2	290.5	609.6	10.0%	13.1%

seems to be increasing, and it appears that the maturity structure of corporate debt has also improved. Moreover, the rapid rise in stock prices over the last few months has significantly increased the market value of publicly held firms. As a result, new offerings of common stock have risen substantially -- providing additional funds for capital spending. In summary, although fixed investment may be a drag on the economy in the short run, economic expansion, declining interest rates, moderate inflation, and the change in the tax code should support a significant recovery in capital spending through the 1980s.

CORPORATE PROFITS

From $253 billion in 1979, or 10.5 percent of GNP, before-tax corporate profits declined by 30 percent to $176 billion in 1982, or 5.7 percent of GNP. Last year's profit share of GNP was the smallest since 1938. Of the overall $77 billion decline in profits, over half was attributable to two factors: a decline in inventory profits (the Inventory Valuation Adjustment) and a reduction in the amount of profits due to the understatement of depreciation (the Capital Consumption Adjustment). From 1973 through 1981, these two factors accounted for almost 20 percent of before-tax profits. In contrast, they represented only 8 percent of before-tax profits in 1982.

Before-tax profits of financial corporations rose from $16 billion in 1973 to $30 billion in 1979, before falling to just under $24 billion last year. This overall pattern, however, conceals the disparity of the two major components. Profits of the Federal Reserve System rose throughout the period, from $4.5 billion in 1973 to $9.6 billion in 1979 and to almost $16 billion in 1982. In contrast, profits of all other financial corporations rose from $11.4 billion to $20.7 billion between 1973 and 1979 but fell to $8.0 billion in 1982. The decline in profits since 1982 is largely attributable to losses incurred by the savings and loan industry. The profit squeeze was particularly severe for those institutions with a large proportion of their portfolios in older, low-yielding mortgages and located in those areas of the country hardest hit by the slump in the residential housing market.

Before-tax profits of nonfinancial corporations peaked in 1979 at $192 billion before falling to $134 billion in 1982. Operating profits — that is, profits adjusted for inventory profits and under-depreciation -- actually peaked in 1978. The rise in operating profits from 1973 to 1978 reflected both an increase in output and an increase in profits per unit of output. This increase in profit margins occurred as the rise in unit prices slightly exceeded the rise in unit costs. By contrast, the decline in operating profits between 1978 and 1982 was entirely the result of a 16 percent decline in profit margins. The output level of nonfinancial corporations actually rose slightly between the two years.

Between 1978 and 1982, unit prices rose at an annual rate of 8.4 percent. Unit labor costs, however, rose at an 8.7 percent annual rate, and unit nonlabor costs, at a 12.3 percent annual rate. In particular, net interest costs per unit of output were rising at a 17.9 percent annual rate. Increased net interest costs accounted for 29 percent of the decline in profit margins, while increased labor costs and indirect business taxes accounted for 17 percent and 14 percent, respectively. Depreciation expense, adjusted to a replacement-cost basis, accounted for the remaining 40 percent. By 1982, profits of nonfinancial corporations had declined to only 6.8 percent of receipts from current production, down from 11.0 percent in 1978.

The increase in net interest expense, of course, reflects the rapid and dramatic rise in the level of interest rates over the period and the associated stringency in capital markets. Nonfinancial corporations were compelled to rely more heavily on the issuance of short-term debt to finance investment and working capital needs. As a result, long-term debt declined to 52 percent of the total credit market debt by the end of 1982 compared with 57 percent just four years earlier. The increase in the capital consumption allowance reflects the increase in the prices of capital goods, which rose at an annual rate of 7.5 percent over the period, and the fact that the amount of depreciation accruing each year is not closely related to changes in the level of output.

The long-term outlook provides for a decidedly more favorable growth of corporate profits than that experienced in recent years. In particular, four factors are critical: (1) a sustained economic recovery and expansion, (2) return to a lower and more stable rate of inflation, (3) a modest decline in the level of interest rates, and (4) return to more normal growth in productivity. Over the decade of the 1970s, growth in labor productivity fell to less than half that of the 1960s, while the increase in compensation rates accelerated. By late 1981, unit labor costs of nonfinancial corporations were rising at an annual rate of almost 11 percent. During 1982, however, these corporations were able to register remarkably large increases in productivity despite declining output. As a result of cost cutting measures, the increase in unit labor costs fell to just over a one percent annual rate in the third quarter. Over the forecast period, with productivity increasing at an annual rate in excess of 2 percent for nonfinancial corporations, unit labor costs are projected to rise less rapidly than unit prices.

The decline in interest rates will have a greater-than-normal effect in reducing net interest costs of nonfinancial corporations because short-term debt accounts for an historically large share of total debt. Also, the decline in interest rates, along with a projected recovery in the housing industry, will provide for significant increases in the profits of financial corporations other than the Federal Reserve. Furthermore, projected inventory rebuilding to meet increased sales demand will lead to increased inventory profits. Although profit margins of nonfinancial corporations are expected to more than double over the period, profits would still represent only 11 percent of the price of each unit of output, the same as in 1978 and well below the 14.6 percent level of 1968.

Finally, the projected increase in before-tax profits somewhat understates the improved financial position of corporations. As a result of the Accelerated Cost Recovery provisions of the Economic Recovery and Tax Act of 1981, as modified by subsequent legislation, businesses will be allowed to expense for tax purposes a larger amount of depreciation. With the projected increase in capital goods prices, the legislation will result in tax-based depreciation which actually exceeds economic depreciation by an increasing amount. Although before-tax profits are reduced by that amount, corporate internal cash flow (retained earnings plus book depreciation) is improved.

THE FOREIGN SECTOR

The external sector of the U.S. economy is not expected to show a significant change over the 1982-1988 period. A $29.8 billion real net exports surplus is forecast for 1988, versus a $30.9 billion surplus in 1982. The 1988 figure, however, represents an improvement from 1983's anticipated $25.5 billion surplus.

A number of offsetting factors account for the rather uneventful overall trend. The merchandise trade balance is projected to deteriorate. Higher U.S. economic growth rates will be consumer-based, resulting in a strong import pull. This effect will be more pronounced than the pull on U.S. exports resulting from higher growth among the nation's major trading partners. The explanations for that expectation are, first, that the United States will lead the recovery, and second, that this country is not a consumer goods exporter. An additional factor adversely affecting the trade picture is the relative strength of the U.S. dollar, which causes U.S. exports to be less competitive in some markets.

During the period to 1988 the dollar's value is, nevertheless, projected to erode slightly, although no precipitous drop in its value is anticipated. The factors mitigating the trade outlook have been in place for some time. One very important factor is the anticipated improvement in inflation, though concerns remain regarding the fiscal deficits and their impact on inflation expectations. Additionally, interest rates will average near current levels during the forecast period, which will generally favor capital inflows.

Another powerful factor favoring capital movements into the U.S. economy is the world political situation. Most outside disruptions tend to favor the dollar because of the nation's more insulated position. Disturbances in Eastern Europe adversely impact Western European currencies. Middle Eastern problems affect the Japanese yen and European currencies more than the U.S. dollar. Hence, although specific events are difficult to anticipate, the dollar is expected to be strengthened by world political events.

Even oil price developments may favor the dollar in the short run. Declining oil prices are viewed as disruptive and, hence, as more favorable to the dollar than to other currencies. Clearly, Europe and Japan are more dependent on imported oil than the United States. They should, therefore, be net beneficiaries of oil price developments during the near term. However, it should be noted that if oil prices should collapse (not the assumption of this study), that development would be more favorable to the dollar in a system wide sense, as indicated by the strains to the international financial system that emerged during periods of high oil prices. It would also favor the dollar in a foreign policy sense, as it would eliminate a "hammer held over our head".

The debt problem of the developing countries has generally been viewed by the markets as neutral to the dollar. Other nations are also exposed to problems resulting from the LDC debt situation. The dollar's central role in the world financial system is another factor ultimately favoring the dollar in this regard. The assumption of this study is that these problems will be less severe at the end of the forecast period than now. This outlook arises from expectations of lower oil prices. less explosive interest-rate trends, and higher economic growth in the industrial countries. The last of these will result in a stronger pull on developing-country exports, less borrowing, and, hence, fewer debt problems.

The world financial system will be buffetted over the next five years, but it is likely that the strains will be less severe than those of the last five years, which resulted from hyper-inflation and interest-rate binges. However, as has been stressed in this report, fiscal deficits in the United States and other industrial countries are the paramount threats overhanging world financial markets. As has been the case, no dramatic change in the world financial system is anticipated. The U.S. dollar is expected to remain supreme, with the European Monetary System becoming increasingly tattered, Japan hesitantly opening-up its financial system, gold remaining in abeyance, and Special Drawing Rights in a holding-pattern. The system will probably continue to move away from exchange-rate flexibility. ■

UNITED STATES INDUSTRY OUTLOOK

PAST AND FUTURE COMPARATIVE GROWTH TRENDS

The period 1973-1982 was characterized by relatively sluggish growth rates for most major sectors of the U.S. economy when compared with the anticipated growth in output for the period 1982-1988. In the following section ten major sectors of the U.S. economy will be evaluated in terms of their inflation-adjusted value of output projected for the 1982-88 period: consumer discretionary — durables; consumer discretionary — nondurables and services; consumer nondiscretionary — nondurables; utilities; capital spending; technology; financial; industrial commodity; and, retail. In addition to evaluating those ten key sectors the major industries within those sectors will also be examined. As a second step, this section also provides an assessment of output by industrial category as well as the expected compound annual growth in employment for those industry groupings. Finally, a summary table has been provided at the end which shows the anticipated compound annual growth in output for seventy-two separate industries; these industries are ranked — highest to lowest — in terms of their projected growth in output for the 1982-88 timespan. In the summary table the expected effects of inflation have been removed so that the "real" value of output could be estimated. Interestingly, fifty-three industries are foreseen growing more rapidly than U.S. GNP.

Industry Growth and Real GNP — Technology

Eight industry segments are expected to record real growth rates over the 1982-88 period that will exceed the trend growth rate of GNP (3.7 percent). This outcome is possible mainly because the net export sector of output, which is not included in this comparison, is expected to make a very weak contribution to GNP growth. The most rapidly growing of the eight will be the "technology" segment with a forecast trend growth rate of 8.1 percent. Likewise, during the 1973-82 timespan, the technology segment outperformed all other industry segments. Clearly the age of technology will provide continued thrust in the coming years. However, while real growth in the office equipment category was more than double that for electronics during the 1973-82 period, the years immediately ahead will see a shift in emphasis with electronics actually nearing the growth rate for office equipment.

One of the main reasons for the approaching reversal in roles is the relatively slower growth of computers and related equipment. That market will expand just under 10 percent annually for the forecast period compared with a more than 12 percent growth rate for the historical period. Moreover, electronic technology applications are expected to accelerate in other industry categories; for example, in the communications equipment field, in sales of electronic components, in engineering and scientific applications, and in medical and surgical uses. As will be seen later, although there has been a reversal in roles among the industry sub-groupings of the technology segment, the overall segment outlook is very bright given the anticipated rebound in capital spending that is forecast to occur during the 1982-88 period.

Consumer Discretionary — Durables

Real growth trends in the "consumer discretionary — durables" segment are projected to average well above the real growth level forecast for GNP, at 6.3 percent. That growth rate is second highest among all ten segments. Even more importantly, during the previous period that segment registered a decline of 0.2 percent. A quick look at the industry sub-groups comprising the consumer discretionary — durables aggregate helps explain the turnaround. For example, in recent years the industry sub-groups of automobiles, automobile parts, tire and rubber goods, and building materials have performed quite poorly. As a result, as these industries begin to revive, they will be coming off of very dismal prior-period results; modest improvement appears to be significant in percentage terms.

COMPARATIVE GROWTH TRENDS

(Compound Annual Growth Rates by Sector and Primary Industry)

	Real Growth (%) 1973-82	1982-88
Consumer Discretionary — Durables	**–0.2**	**6.3**
Automobile	–1.6	8.3
Automobile Parts	0.6	4.7
Building Materials	–0.6	6.3
Household Appliances	1.1	5.4
Textile and Apparel	1.4	4.8
Tire and Rubber Goods	–1.1	5.5
Consumer Discretionary — Nondurables and Services	**2.4**	**4.5**
Brewers and Distillers	1.4	3.2
Cosmetics and Toiletries	1.0	3.2
Publishing	1.3	2.3
Air Transportation	0.7	5.6
Hotel-Motel and Restaurants	1.1	2.8
Leisure Time	1.3	5.6
Consumer Non-Discretionary — Nondurables	**0.9**	**1.9**
Drug and Medical Supplies	1.0	3.0
Food and Allied Products	0.9	1.9
Soaps	–2.3	3.1
Tobacco and Allied Products	1.0	0.1
Utilities	**2.3**	**3.8**
Telecommunications	4.9	5.5
Utilities — electric	2.7	3.3
Utilities — natural gas	–1.4	2.0
Capital Spending	**0.2**	**5.3**
Aerospace	1.0	7.7
Electric Equipment	–0.1	5.3
Machinery, General	–1.3	5.0
Transportation	1.4	4.5
Technology	**6.0**	**8.1**
Electronics	4.4	7.5
Office Equipment	11.2	9.5
Financial	**2.0**	**3.9**
Banks and Finance Companies	2.0	3.9
Insurance	2.0	3.9
Energy	**1.2**	**2.2**
Machinery — oil well	–0.7	3.6
Oil — domestic and international	1.4	2.0
Industrial Commodity	**–0.3**	**4.5**
Chemical and Allied Products	1.5	4.1
Forest Products	–1.1	6.5
Metals and Mining	–1.9	4.6
Paper and Paper Containers	0.5	3.8
Retail	**2.2**	**4.0**

While it is presently anticipated that the auto and building industries will recover during the projection period, it is also of great significance that the concurrent interest rate environment will preclude any phenomenal rebound. Indeed, a worse interest rate climate could reduce considerably the strength of any rebound. By definition, the discretionary nature of this market segment causes its forecasted real growth rate to be subject to a number of external influences — particularly those related to consumer attitudes and buying plans. In addition, some sub-groups of this market segment, particularly household appliances, are linked closely to the expected recovery in the real estate and homebuilding industries.

Capital Spending

The economic recovery, recent changes in corporate income tax structure, and the emphasis on stimulating capital spending are expected to promote a surge in the "capital spending" segment, pushing that segment's growth rate to the number three spot for the 1982-88 period. By comparison, the 1973-82 ranking for that segment was number eight. The expected trend rate of real growth in the capital spending segment over the projection period is 5.3 percent. Beyond a general improvement in capital spending, the goal of achieving a substantially strengthened military posture over the next several years will require outlays of major proportions for both primary military suppliers and for their secondary, peripheral suppliers. Of course, within the major industry segment some sub-groups will outperform others.

In the aerospace sub-group capital spending on aircraft should record the highest growth rate. The higher growth will be a result of increased defense spending and — expected later in the period — a turnabout in the commercial airline industry. Engines and turbines are foreseen as the leading capital spending component in the electric equipment sub-group. In the general machinery sub-group the best performer is metal machine tools. (Metal machine tools actually posted a decline of more than one percent during the 1973-82 span.) Also within the capital spending segment, the railroad-industry category of the transportation sub-group is expected to show some revival, as is trucking and highway passenger transportation.

Consumer Discretionary — Nondurables and Services

The fourth place ranking for real growth among the ten principal market segments actually shows a tie for the forecast period. However, the "consumer discretionary — nondurables and services" segment will be discussed first since it also showed a higher ranking during the historical period. The "industrial commodity" segment — also tied for fourth place in the projected real-growth array — will be discussed in the next section. With a projected real-growth rate of 4.5 percent for the 1982-88 period, the "consumer discretionary — nondurables and services" segment is expected to grow slightly faster than the anticipated 3.7 percent rate of expansion for the economy as a whole. Similarly, this segment performed near the same pace as the overall economy during the historical period.

Probably the most striking observation concerning this market segment's real growth prospects is that there is actually very little projected change in the real magnitude of consumer spending on nondurables and services. The discretionary nature (by definition) of this market segment in terms of its place in the consumer budget might lead one to expect a greater response than is apparent. However, it is likely that much of the cyclicality of the interim years has been lost by using the average growth rate, and that this category will show a strong cyclical response during 1983 and 1984.

Industrial Commodity

As in the previous section, the "industrial commodity" segment is projected to show a real growth rate of 4.5 percent, not much over the real growth rate forecasted for the nation for the 1982-88 time span. During the historical period the industrial commodity segment was ranked tenth in terms of real growth when compared with the other nine primary-market segments. Moreover, the historical growth rate of –0.3 percent is substantially below the rate for the economy as a whole. Unlike the consumer-discretionary segment just discussed, the industrial commodity segment has displayed a high degree of response to business cycle swings.

The sub-group of metals and mining experienced pervasive weakness among its industries during the historical period but is expected to record a much better growth rate for the forecast period. The forest products sub-group will follow similar trends, but the rebound in the overall economy and in construction in particular will allow the forest products industries to achieve an aggregated growth rate of 6.5 percent. Within the industrial commodity segment, the two sub-groups of chemical and allied products, and paper and paper containers showed moderate expansion for the historical period and are projected to continue to show a moderate and sustainable growth trend for the forecast period.

Retail

The retail category fell from fourth place in the historical period to fifth place during the forecast period even though the projected forecast growth rate of 4 percent is nearly double that of the earlier period. One of the major reasons for the fifth place ranking of the retail segment is that the present economic recovery, although consumer-led, will likely not register the sizable gains in consumer spending that would typically be expected. The anticipated continuance of relatively high real interest rates, particularly during the early years of the outlook period, is foreseen keeping a lid on consumer spending relative to what might be the case if interest rates were more accommodative. Similarly, the early years of the forecast period will probably be marked by slowly abating reluctance on the part of consumers to make a formidable re-entrance into the marketplace after several years of fear and pessimism regarding economic conditions.

Financial

The financial sector, ranked sixth in terms of real growth forecast for the 1982-88 period, will expand at just over the rate projected for the economy as a whole, 3.9 percent. Like the retail sector, the financial sector fell a notch from the historical to the projection period; this, even though the outlook period anticipates a somewhat better growth rate than the two percent recorded from 1973-1982.

One of the major reasons for the acceleration in growth for the financial sector is the increasingly competitive nature of the industry as banks, finance companies, and other finance-related institutions hurry to expand the range of services they can offer as a result of financial institution deregulation. This trend is expected to continue in the years ahead. Moreover, insurance companies and other non-financial firms will continue to make inroads into traditional banking fields causing them to expand their influence on the financial services sector. Over the forecast horizon it is expected that similar growth rates will be registered for the sector sub-groups of banks and finance companies and for insurance companies.

Utilities

Real growth in utilities over the 1982-88 forecast period is expected to average right at 3.8 percent, or almost exactly the same as the trend growth rate of GNP. That rate of increase for utilities would accord it the seventh place ranking in terms of real growth rates among all ten industry segments. Notably, the utilities sector was in third place in the growth-ranked array of the historical 1973-82 period. The telecommunications (telephone and telegraph) sub-group is assumed to show the strongest growth over the projection period. The telephone and telegraph industries have seen their market positions eroded by new information-transmitting technologies and also by increased competition from non-electronic delivery systems. In addition, slower economic growth, particularly the homebuilding slowdown, has had a negative influence on telecommunications orders. Most of these problems will be resolved over the next several years, triggering the modest increase in the industry's growth.

Both electric utilities and natural gas utilities have been through some uncomfortable times during the past several years. To mention just a few of the abrasive market forces that those industries have had to endure: soaring financing and capital costs; heightened cost pressures from all phases of production — generating costs have been pressed ever higher from both market and environmental forces — and an inability to raise revenues sufficiently due to rate resistance. Nonetheless, the outlook for the next several years for both electric and natural gas utilities is somewhat improved compared with the immediate past. In particular, the capital cost trend should be improving and at the same time a modest revitalization in business capital spending should improve those industries' outlooks, as will the general upswing in economic activity.

REAL OUTPUT AND EMPLOYMENT BY PRODUCING SECTOR
(Compound Annual Growth Rates)

	OUTPUT Real Growth (%)		EMPLOYMENT	
	1981-82	1982-88	1981-82	1982-88
Agriculture, Forestry, Fishery	–5.3	2.5	0.6	–1.6
Mining	–0.1	2.2	N.C.	5.0
Construction	–3.1	4.7	–1.3	4.5
Nondurable Goods Manufacturing	–2.3	3.3	–2.5	N.C.
Durable Goods Manufacturing	–9.0	6.4	–5.5	3.3
Transportation	–2.5	4.6	–3.2	1.9
Utilities	0.1	3.8	–1.8	1.6
Wholesale Trade	–2.8	4.4	–0.8*	3.1*
Retail Trade	0.2	4.0	N.S.S.	N.S.S.
Finance and Insurance	–1.2	3.9	–1.5	3.0
Real Estate	–1.5	3.5	N.C.	1.6
Services	0.5	4.2	1.2	3.3
Federal and State and Local Govt. Enterprises	–0.9	3.7	0.6	0.9

N.C. = No Change
N.S.S. = Not Shown Separately
*Figure represents Wholesale and Retail Trade Aggregated

Other Major Market Segments

The two major sectors of the economy left to be discussed both have projected real growth rates that fall below that anticipated for the economy as a whole. The eighth ranked sector, energy, is expected to record a compound annual growth rate of 2.2 percent for the 1982-88 period, compared with an historical growth rate of 1.2 percent for the 1973-82 time span. It is abundantly clear that for at least the next couple of years there will be sufficient energy supplies available to preclude any massive program to expand substantially domestic petroleum output. Indeed, in the current environment the goal of most producer firms appears to be to reduce output to support higher prices while at the same time incorporating more efficient, cost-saving technology. For that reason, it is expected that output of oil-well machinery will expand more rapidly than will output of petroleum and petroleum products. With the present worldwide excess of petroleum, many industry observers suggest that several years of scaled-back production will be required to bring petroleum supplies back down into line with anticipated consumption. That view, of course, depends upon the avoidance of a major disruption in petroleum production associated with political or natural catastrophe.

The consumer nondiscretionary-durables sector placed last in terms of projected growth over the 1982-88 period, with a compound annual growth rate of 1.9 percent. It is not surprising that this category would not show substantial growth since, by definition, it includes those product groupings which consumers are least likely to forego during a downturn in economic activity, e.g., drug and medical supplies; food and allied products; soaps; and tobacco and allied products. There is, of course, some cyclicality in consumption of these goods and, therefore, a modest improvement over the 1982-88 period is projected. It is difficult, unfortunately, to ascertain what portion of the increase in output is associated with rising income levels, population growth, or changing tastes and preferences.

REAL OUTPUT AND EMPLOYMENT

The projected 1982-88 growth in real output by major sector and industry has been discussed previously. However, it is also interesting to compare anticipated growth in output with the expected change in employment. Not only does this type of comparison provide an insight into productivity changes but it also gives some idea of where the new employment opportunities in U.S. labor markets are likely to be found in the years ahead. The industry grouping agriculture, forestry, and fishery provides a good example of an anticipated gain in real output with a concurrent decline in employment and underscores the ongoing shift toward more use of capital and less of labor — particularly in large operations such as agribusiness firms. Conversely, the mining industry has a projected growth in output of only 2.2 percent, compared with a gain in employment of 5 percent. Federal and state and local government enterprises provide an example of an enforced shift toward greater productivity that is the result of substantial efforts to pare government expenditures while raising revenues from government enterprises. For this reason, despite the forecast increase in output of nearly 4 percent for that industry group, employment growth is expected to be held to under one percent, at a compound annual rate.

In the industry groupings of manufacturing, transportation, and utilities, there is a substantial disparity between the anticipated increase in real output and in employment growth. The difficult economic environment of the past few years and the incorporation of new technologies — including the trend toward automation — will allow a shift away from labor-intensive production techniques as firms strive to maintain the efficiencies gained in the past few difficult years and to make additional labor-saving improvements.

There are, of course, some industry groupings that do not lend themselves readily to pervasive automation; wholesale and retail trade, finance and insurance, and service industries are representative. Although there has definitely been a great deal of effort on the part of those industries to cut manpower requirements, the traditional "people orientation" associated with these industries makes the introduction of new technologies more difficult and less rapid. The construction industry is in a similar situation although for a different reason: there is still a tremendous amount of "people-work" that simply cannot be done mechanically with present technology. Perhaps a greater acceptance of manufactured housing will, at some future time, allow a reduction in manpower requirements but that day does not appear to be "just around the corner". ■

OUTPUT BY PRODUCING SECTOR (1977 $)
COMPOUND ANNUAL GROWTH RATES
RANKED ACCORDING TO: 1982-1988

	1982-88		1982-88
Computers	9.91	Knitting	4.62
Ships, Boats	8.60	Furniture	4.58
Motor Vehicles	8.33	Agricultural Machinery	4.49
Other Transportation Equipment	8.17	Iron Ore Mining	4.44
Communication Equipment Electronic Comp.	7.91	Transportation Services	4.41
Aerospace	7.65	Wholesale Trade	4.41
Scrap and Used Goods	7.50	Non-Ferrous Metals Mining	4.38
Instruments	6.70	Coal Mining	4.22
Engines and Turbines	6.67	Other Chemicals	4.21
Service Industry Machinery	6.52	Automotive Repairs	3.98
Lumber	6.50	Water Transport	3.98
Other Non-Ferrous Metals	6.13	Owner-Occupied Housing	3.95
TV Sets, Radios, Phonographs	6.09	Retail Trade	3.95
Stone, Clay, Glass	6.06	Finance and Insurance	3.94
Miscellaneous Manufacturing	6.05	Ferrous Metals	3.83
Business Services	6.01	Paper	3.80
Air Transport	5.64	Federal and S&L Government Enterprises	3.74
Metalworking Machinery	5.61	Construction, Mining, Oilfield Equipment	3.55
Miscellaneous Non-Electrical Machinery	5.56	Real Estate	3.47
Rubber Products	5.51	Water and Sanitation	3.43
Communications Services	5.46	Agricultural Fertilizers	3.29
Metal Products	5.38	Electric Utilities	3.28
Movies and Amusements	5.22	Eating and Drinking Places	3.14
Special Industry Machinery	5.15	Pipeline	3.09
Plastic Products	5.15	Printing and Publishing	3.02
Elec. Industrial App. and Distrib. Equipment	5.08	Railroads	2.95
Copper	5.07	Hotels; Repairs Exc. Auto	2.78
Other Office Equipment	5.03	Agriculture, Forestry, Fishery	2.50
Trucking, Highway Passenger Transit	5.02	Petroleum Refining	2.42
Textiles, Exc. Knits	5.01	Medicine; Education, NPO	2.37
Household Appliances	4.94	Gas Utility	2.00
Non-Metallic Mining	4.88	Food and Tobacco	1.93
Shoes and Leather	4.71	Fuel Oil	1.79
Construction	4.67	Crude Petroleum	0.83
Electrical Lighting and Wiring Equipment	4.65	Government Industry	0.82
Apparel, Household Textiles	4.65	Natural Gas Extraction	0.38